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Polity

Topic 1 - SC on Anticipatory Bail in Caste Crime Cases

Syllabus	Polity and Constitution Fundamental Rights Right to Equality
Context	The Supreme Court recently set aside the Bombay High Court's order granting anticipatory bail in a caste-based crime, reaffirming that Section 18 of the SC/ST (Prevention of Atrocities) Act, 1989 , bars pre-arrest bail when a prima facie case exists.
SC/ST (Prevention of Atrocities) Act, 1989	<ul style="list-style-type: none"> ❖ Aim: To protect SC/ST members from caste-based violence, discrimination, humiliation and exploitation. ❖ Offences Covered: <ul style="list-style-type: none"> ➤ Physical assault, caste-based abuse, sexual violence. ➤ Land grabbing, social/economic boycotts, and denial of access to public spaces. ➤ Electoral coercion against SC/ST voters. ❖ Key Provisions: <ul style="list-style-type: none"> ➤ Special courts for speedy trial. ➤ Stringent punishments and victim/witness protection. ➤ Section 18: Bars anticipatory bail for offences under the Act. ❖ Amendments (2018): Expanded offences, enhanced victim compensation, and increased accountability of public officials.
Why Anticipatory Bail is Barred?	<ul style="list-style-type: none"> ❖ Legal Basis: Section 18 of the Act explicitly bars anticipatory bail (CrPC Section 438/482). ❖ Rationale: To prevent witness intimidation, evidence tampering, and ensure victim dignity → ensures prosecution is effective. ❖ Court's Clarification: Kiran vs. Rajkumar Jivaraj Jain (2025) Case <ul style="list-style-type: none"> ➤ Atrocities under the Act form a separate class linked to systemic discrimination. ➤ The bar on anticipatory bail is constitutionally valid under Articles 14 and 21. ➤ Bail decisions should not involve a "mini-trial"; only a prima facie assessment is required.
Key Observations of the SC	<ul style="list-style-type: none"> ❖ Public View: Insults and assaults outside a home are "within public view" (Section 3(1)(r)). ❖ Electoral Retaliation: Targeting an SC/ST voter for their choice falls under Section 3(1)(o). ❖ Evidence Consideration: Independent witness statements, weapon recovery, and medical evidence strengthened prosecution; the High Court erred in granting bail. ❖ Judicial Guidance: High Courts should avoid evidence evaluation at the pre-arrest stage; apply the Section 18 prima facie test strictly.

Way Forward	<ul style="list-style-type: none"> ❖ Uphold Legislative Intent: Section 18 ensures substantive protection for SC/ST communities. ❖ Strict Application: Courts must apply the prima facie test without dismissing allegations prematurely. ❖ Protection from Retaliation: Bars intimidatory tactics against Dalit and tribal complainants. ❖ Democratic Safeguard: Electoral retaliation against SC/ST voters threatens social justice and democratic participation. ❖ Rule of Law: Reinforces accountability and safeguards dignity, security, and equality of vulnerable groups.
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Topic 2 - Right to Housing under Article 21

Syllabus	Polity and Constitution Fundamental Rights Right to Life
Context	The Supreme Court recently reaffirmed that housing is a fundamental right under Article 21 , linking it to commercial real estate, homebuyers' protection, and systemic reforms. Shelter is not just a roof but a safe, habitable dwelling with essential services.
Constitutional Basis	<ul style="list-style-type: none"> ❖ Article 21: "No person shall be deprived of his life or personal liberty except according to procedure established by law." Interpreted to include right to live with dignity, which encompasses: <ul style="list-style-type: none"> ➤ Right to shelter ➤ Access to basic services (water, sanitation, electricity) ➤ Social and economic justice. ❖ Judicial Precedents: <ul style="list-style-type: none"> ➤ Olga Tellis v. Bombay Municipal Corp (1985): Court recognized the "Right to Livelihood" as part of Article 21, asserting that eviction (pavement dwellers) without alternative accommodation would violate the right to life. Shelter was linked to the means of livelihood. ➤ Shantistar Builders v. Narayan Khimalal Totame (1990): Right to life includes the right to a decent environment and a right to shelter. ➤ Chameli Singh v. Union of India (1996): Explicit recognition of the right to shelter under Article 21. ➤ Mansi Brar Fernandes v. Shubha Sharma (2025): <ul style="list-style-type: none"> ■ The Court declared that the "right to secure, peaceful, and timely possession of one's home" is a facet of the fundamental right to shelter under Article 21. ■ Housing is a fundamental human need, not a mere commercial commodity or speculative instrument (privilege).



	<ul style="list-style-type: none"> ■ Court Directions: To RERA and government bodies against failing homebuyers - <ul style="list-style-type: none"> ● Ensure timely possession ● Prevent speculative misuse of housing laws ● Strengthen regulatory and insolvency frameworks.
Current Housing Challenges in India	<ul style="list-style-type: none"> ❖ Urban Shortage: ~29 million units needed, mostly for EWS/low-income groups. ❖ Informal Settlements: 35%+ urban population in slums/unauthorized colonies. ❖ Rural Housing Gaps: Many rural households still lack pucca house despite PMAY-G.
Significance of the Recent Judgment	<ul style="list-style-type: none"> ❖ Homebuyer Protection: Recognizes them as vulnerable stakeholders. ❖ Warning Against Real Estate Bubbles: Tackles speculative pricing and cash deals. ❖ Revival Fund Recommendation: A government-backed fund to complete viable stalled projects. ❖ Committee for Reform: High Court judge-led panel to overhaul real estate governance.
Policy Dimensions	<ul style="list-style-type: none"> ❖ Government Schemes: PMAY (Urban & Gramin), Rajiv Awas Yojana, Indira Awas Yojana. ❖ Financial Issues: High NPAs, informal cash economy in real estate financing. ❖ Social Justice: Housing links to health, education, women's empowerment, and poverty alleviation.
Way Forward	<ul style="list-style-type: none"> ❖ Strengthen RERA: Empower regulators for enforcement and faster dispute resolution. ❖ Affordable Housing Finance: Expand credit-linked subsidies, lower interest rates for weaker sections. ❖ Land Reforms & Urban Planning: Land pooling, inclusionary zoning for equitable urbanization. ❖ Revival Fund: Transparent norms, independent oversight, and time-bound disbursement. ❖ Public-Private Partnerships: Encourage socially responsible real estate development. ❖ SDG Integration: Link housing to SDG 11 (Sustainable Cities) & SDG 1 (No Poverty).

**Topic 3 - SC Guidelines on DNA**

Syllabus	Constitution Fundamental Rights
Context	<ul style="list-style-type: none">❖ Supreme Court in Kattavellai @ Devakar v. State of Tamil Nadu (2025) issued uniform guidelines for the collection, preservation, and presentation of DNA in criminal cases to ensure the reliability and integrity of evidence.❖ The Supreme Court of India (SC) has played a vital role in regulating the use of DNA evidence, aiming to balance its powerful forensic potential with the fundamental rights of individuals, particularly the Right to Privacy (Article 21) and the Right against Self-Incrimination (Article 20(3)).
Key Points	<ul style="list-style-type: none">❖ Proper Documentation: DNA samples must include FIR details, sections, names of the Investigating Officer (IO), the medical officer, and the independent witnesses.❖ Timely Dispatch (48-Hour Rule): Samples must reach Forensic Science Lab within 48 hours; delays require written justification.❖ Safe Storage: Sealed samples cannot be opened or tampered with without trial court permission; refrigeration is mandatory.❖ Chain of Custody Register: All State DGPs must prepare and circulate standardized custody forms to ensure traceability.
Judicial Precedents	<ul style="list-style-type: none">❖ Anil vs. Maharashtra (2014): DNA valid if lab QC is maintained.❖ Manoj vs. MP (2022): Report rejected due to contamination risk at open recovery site.❖ Rahul vs. Delhi (2022): Rejected after 2-month Malkhana storage without safeguards.

**Topic 4 - Urban Fiscal Architecture in India**

Syllabus	Polity Local Bodies
Context	Despite generating nearly two-thirds of India's GDP , municipalities control less than 1% of tax revenue .
Structural Flaws in Urban Fiscal Architecture	<ul style="list-style-type: none"> ❖ Revenue-Responsibility Gap: Cities produce 66% of GDP but get <1% of tax revenue; over 75% of municipal budgets depend on higher-level transfers. ❖ Over-centralisation Post-GST: Absorption of local taxes (octroi, entry tax) into GST eroded city control. E.g.: Mumbai lost ~₹7,000 crore annually after octroi abolition. ❖ Grant Dependence: ULBs rely on state and central grants for over 75% of their budgets. Funding tied to central schemes like AMRUT & Smart Cities, reducing flexibility. ❖ Weak Own-Source Revenue: Property tax, user charges, and fees underutilized or poorly collected (Property tax only ≈0.12% of national GDP, compared to ≈3% in OECD nations). ❖ Weak Local Autonomy: Cities need state approval to revise property/professional taxes. ❖ Inversion of Democracy: Fiscal power centralised; service delivery decentralised - cities manage housing, waste, and climate adaptation without revenue authority.
Causes of Revenue Loss	<ul style="list-style-type: none"> ❖ Post-GST Shock: Nearly 19% of traditional city taxes subsumed; no direct GST compensation to ULBs. ❖ State Control: States decide property tax valuation and collection, limiting municipal independence. ❖ Administrative Weakness: Outdated records, low digitalisation; only 60–65% property tax coverage in Tier-II cities. ❖ Weak Devolution: 74th Amendment poorly implemented - only 10–12 states have regular Finance Commissions.
Municipal Bonds - Promise vs Reality	<ul style="list-style-type: none"> ❖ Policy Hype, Limited Reach: Only 40+ cities issued bonds; success limited by weak balance sheets. ❖ Flawed Credit Ratings: Overemphasis on "own revenue," ignoring stable grants and shared taxes. ❖ Self-Reliance Bias: Institutions like the World Bank push user charges over shared revenue models. ❖ Need for Governance-Based Ratings: Ratings should reward transparency, compliance, and citizen participation, not just income.

Roadmap for Urban Fiscal Reform	<ul style="list-style-type: none"> ❖ Recognise Shared Taxes as Local Income: Include GST compensation and grants in municipal accounts for better credit profiles. ❖ Reform Credit Ratings: RBI can introduce a governance-weighted index measuring transparency and participation. ❖ Create Urban Fiscal Fund: Set up a Municipal Financing Authority like Sweden's Kommuninvest for pooled, low-cost loans. ❖ Guarantee Fiscal Transfers: Amend laws to ensure untied, predictable grants under Article 280(3)(bb). ❖ Enable Borrowing Rights: Allow ULBs to securitise a share of GST or state revenue as collateral for bonds.
Conclusion	India's cities fuel its economy but lack fiscal freedom. Strengthening municipal finance through devolution, credit reform, and guaranteed transfers makes cities engines of equitable growth.

Topic 5 - Restoring Fiscal Space for the States	
Syllabus	Polity Fiscal Federalism
Context	<ul style="list-style-type: none"> ❖ The growing fiscal imbalance between the Centre and States has revived concerns over fiscal federalism and the need to restore States' financial autonomy through fairer tax devolution. ❖ 'Fiscal space' refers to the room a government has to provide resources for a desired purpose without compromising its financial stability. For states, it means adequate, predictable, and autonomous resources to meet growing responsibilities.
Changing Fiscal Dynamics	<ul style="list-style-type: none"> ❖ India's federal fiscal system shares taxation and spending powers between the Centre and the States. ❖ Since GST (2017), power has tilted toward the Centre, limiting States' autonomy. ❖ The end of GST Compensation (2022) left States vulnerable to revenue shocks. ❖ 2025 GST rate cuts (₹2 lakh crore consumer benefits) may boost consumption but hurt short-term State revenues.
Fiscal Federalism – Constitutional Basis	<ul style="list-style-type: none"> ❖ Articles 268–293: Define Centre–State financial relations. ❖ Article 280: Finance Commission decides tax sharing and grants. ❖ Devolution trend: 11th FC – 29.5% → 12th – 30.5% → 13th – 32% → 14th – 42% → 15th – 41% (after J&K reorg). ❖ Issue: Rising cesses & surcharges (₹4.23 lakh crore in FY26) excluded from the divisible pool, cutting States' shareable revenue.



<p>Impact of GST on States' Fiscal Autonomy</p>	<ul style="list-style-type: none"> ❖ Pre-GST: States had independent taxes like VAT, octroi, and entry tax. ❖ Post-GST: Tax powers pooled under GST Council (Centre has higher vote weight). ❖ Destination-based tax: Benefits consumer States, hurting producer States (Maharashtra, Tamil Nadu, Gujarat). ❖ End of Compensation Cess: Exposed fiscal dependence of States. ❖ Cesses/Surcharges: Allow Centre to raise non-shareable funds, reducing States' fiscal flexibility.
<p>Declining Fiscal Independence</p>	<ul style="list-style-type: none"> ❖ Central transfers: 44% of State revenues; up to 72% for poorer States (e.g., Bihar). ❖ Rich States (e.g., Maharashtra, Karnataka): Receive less, but shoulder higher welfare costs. ❖ Tax ratio unchanged post-GST: Centre – 67%, States – 33%. ❖ Expenditure: States spend 52% of public outlays (health, education, and agriculture). ❖ Centrally Sponsored Schemes (CSS) schemes: Overlap with State subjects; conditional and politically influenced fund transfers → reduces discretionary spending. ❖ Borrowing Restrictions: FRBM limits and Centre-imposed caps constrain fiscal flexibility. → States often resort to off-budget borrowings (via State PSUs/SPVs) to circumvent the FRBM limits, increasing contingent liabilities and fiscal risk.
<p>Rethinking Fiscal Devolution</p>	<ul style="list-style-type: none"> ❖ Share Personal Income Tax (PIT): A 50:50 split could reduce fiscal dependence; the PIT base ≈ is ₹13.57 lakh crore (FY26). ❖ Allow States to "Top-Up" Income Tax: States can levy a small surcharge for local needs without changing the central structure. ❖ Incorporate Cesses & Surcharges into the divisible pool for fairness. ❖ Canadian Model Insight: Centre collects 46% & spends 40%; States collect 54% & spend 60% — better fiscal balance.
<p>Way Forward</p>	<ul style="list-style-type: none"> ❖ Strengthen Finance Commission criteria to ensure equity + efficiency. ❖ Empower the GST Council with equal decision-making rights. ❖ Encourage State-level fiscal innovations – bonds, PPPs, and targeted taxation. ❖ Build cooperative fiscal federalism by restoring States' fiscal space and autonomy.
<p>Conclusion</p>	<p>India's fiscal health depends on empowering its States. Restoring fiscal space through equitable devolution, transparent transfers, and decentralized decision-making is key to achieving balanced growth, cooperative federalism, and sustainable development.</p>

**Topic 6 - Central Information Commission (CIC)**

Syllabus	Indian Polity Bodies
Context	It has been headless for the 7th time in 11 years after the retirement of Chief Information Commissioner Heeralal Samariya.
About Central Information Commission (CIC)	<ul style="list-style-type: none"> ❖ Established: 12 October 2005 under Section 12 of the RTI Act, 2005 (Statutory body). ❖ Structure: Chief Information Commissioner (CIC) + up to 10 Information Commissioners (ICs). ❖ Qualifications: Members must be persons of eminence in public life with wide knowledge in law, science, social service, management, journalism, mass media, or administration. ❖ Appointment: By the President on the recommendation of a committee comprising: <ul style="list-style-type: none"> ➤ Prime Minister (Chairperson) ➤ Leader of the Opposition, Lok Sabha ➤ Union Cabinet Minister nominated by the PM.
Aim	<ul style="list-style-type: none"> ❖ Ensure transparency and accountability in Central Public Authorities. ❖ Promote citizen participation and reduce corruption.
Functions & Powers	<ul style="list-style-type: none"> ❖ Adjudication: To implement RTI Act at the central level and hear second appeals against CPIO decisions. ❖ Can suo motu (on its own motion) order an inquiry into any matter with reasonable grounds. ❖ Penalties: Can impose a penalty on the Public Information Officer (PIO) at ₹250 per day up to a maximum of ₹25,000 for malicious denial, delay, or providing false information. (Sec 20). ❖ Annual Reporting: Submits an Annual Report on the implementation of the Act to the Central Government (which is tabled in Parliament). (Section 25). ❖ Quasi-Judicial Powers <ul style="list-style-type: none"> ➤ Summon witnesses, enforce attendance, and receive evidence under oath. ➤ Requisition and examine public records during inquiry. ➤ Issue directions to improve record-keeping and proactive disclosure.
Challenges	<ul style="list-style-type: none"> ❖ Vacancy Crisis: CIC had only 2 commissioners out of 11 sanctioned posts; no Chief Information Commissioner as of October 2025. ❖ Pendency & Delays: Over 26,000 pending appeals at CIC; 4+ lakh nationwide. Average disposal time exceeds 1 year in many cases. → Making RTI ineffective - termed a "dead letter" by the Supreme Court.

	<ul style="list-style-type: none"> ❖ Opaque Appointments: Supreme Court declined to mandate disclosure of shortlisted candidates for CIC posts (Oct 2025). Civil society flagged “air-dropped” appointments lacking transparency. ❖ Digital Divide & Access Issues: Limited RTI access for rural and non-digital populations. ❖ Weak Enforcement: Penalties imposed in few cases; fosters impunity and administrative apathy. ❖ Legislative Dilution (RTI Amendment Act, 2019) <ul style="list-style-type: none"> ➤ Loss of Statutory Status: Removed fixed tenure and parity of CIC/ICs with Election Commissioners. ➤ Executive Control: Govt empowered to decide tenure, salary, and service terms, curbing autonomy.
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Topic 7 - Right to Information

Syllabus	Polity Governance & RTI
Context	Two decades after its enactment, the Right to Information (RTI) Act - once hailed as India’s most empowering law - faces institutional erosion, legal dilution, and declining transparency amid rising executive control.
What is the RTI Act (2005)?	<ul style="list-style-type: none"> ❖ Enacted in 2005 to ensure citizens’ right to access government information for ₹10, fostering transparency and accountability. ❖ It grants every citizen the legal right to seek information from any "public authority." ❖ Established a 3-tier structure - Public Information Officers (PIOs) → Appellate Authorities → Central & State Information Commissions (CIC/SIC). ❖ Ensured time-bound replies (30 days) and penalties up to ₹25,000 for delay or denial. ❖ Mandated proactive disclosure (Section 4) to minimize secrecy. ❖ Granted equal access - no info denied to citizens that Parliament can seek.
Constitutional Basis	<ul style="list-style-type: none"> ❖ The Supreme Court (in Raj Narain vs. State of UP) established the Right to Information as a Fundamental Right flowing from Article 19(1)(a) (Freedom of Speech and Expression) and Article 21 (Right to Life).
Achievements of RTI	<ul style="list-style-type: none"> ❖ Empowered citizens: Over 2.5 crore applications filed since 2005, promoting participatory governance. ❖ Exposed corruption: Unearthed scams like vyapam scam, 2G, CWG, Adarsh Housing, and MNREGA irregularities. ❖ Strengthened transparency: Forced openness in fund allocation, tenders, and welfare schemes.



	<ul style="list-style-type: none"> ❖ Landmark CIC rulings: PMO, RBI, and even CJI's office brought under RTI. ❖ Grassroots empowerment: Enabled access to pensions, rations, and entitlements for marginalized groups.
<p>Challenges & Decline</p>	<ul style="list-style-type: none"> ❖ Vacancies & delays: CIC/SIC backlogs stretch decades (over 4 lakh appeals pending nationally). ❖ Political interference: Appointments used as post-retirement rewards; autonomy weakened. ❖ Poor enforcement: Only 1.2% of violations penalized - bureaucracy ignores deadlines. ❖ Declining Transparency: Rise in non-disclosure, misuse of exemptions under Section 8, and vague replies. ❖ 2019 Amendment: Gave executive control over tenure and salary of CICs and SICs, eroding independence. ❖ Digital Personal Data Protection (DPDP) Act, 2023 impact: Section 44(3) restricts "personal information," limiting accountability. ❖ Opaque governance: Key public data withheld - unemployment, COVID deaths, crimes. ❖ Judicial complacency: Courts show restraint, weakening RTI's enforcement power.
<p>Way Forward</p>	<ul style="list-style-type: none"> ❖ Fill all vacancies: Ensure timely CIC/SIC appointments per SC's directive. ❖ Restore autonomy: Reinstate fixed tenure and pay structure like the Election Commission. ❖ Balance privacy & transparency: Revisit DPDPA provisions for accountability. ❖ Digital integration: Expand e-RTI portals and public dashboards to reduce pendency. ❖ Civic vigilance: Civil society, media, and courts must defend RTI's independence.

IR

Topic 1 - India-Mauritius Relations

Syllabus	International Relations Neighbouring Countries
Context	India announced a USD 680 million Special Economic Package for Mauritius during PM Navinchandra Ramgoolam's visit to Varanasi.
Key Components of the Partnership	<ul style="list-style-type: none"> ❖ Development & Economic Cooperation <ul style="list-style-type: none"> ➤ USD 680 Million Package: Includes grants and lines of credit for health, infrastructure, and maritime projects. ➤ Healthcare Support: <ul style="list-style-type: none"> ■ Construction of New Sir Seewoosagur Ramgoolam (SSR) National Hospital. ■ First Jan Aushadhi Kendra outside India. ■ AYUSH Centre of Excellence for traditional medicine. ➤ Education & Research: MoUs between IIT-Madras, IIPM-Bengaluru, and the University of Mauritius to promote innovation and skilling. ➤ Infrastructure: <ul style="list-style-type: none"> ■ Motorway M4 and Ring Road Phase II development. ■ New ATC tower at SSR Airport and port equipment acquisition. ❖ Maritime & Strategic Cooperation <ul style="list-style-type: none"> ➤ Port Development: Joint redevelopment of Port Louis to strengthen Mauritius as a regional maritime hub. ➤ Blue Economy & Surveillance: Collaboration in Chagos Marine Protected Area monitoring and EEZ hydrographic mapping. ➤ Defence Support: Helicopters, capacity-building, and joint security initiatives. ❖ Cultural & Civilisational Ties <ul style="list-style-type: none"> ➤ Diaspora Link: Over 68% of Mauritians are of Indian origin, strengthening people-to-people bonds. ➤ Symbolic Gestures: Hosting PM Ramgoolam in Varanasi and participation in Ganga Aarti reinforce spiritual and cultural connections.
Strategic Significance	<ul style="list-style-type: none"> ❖ Mauritius is central to India's Neighbourhood First policy and the SAGAR (Security and Growth for All in the Region) vision, recently expanded to MAHASAGAR. ❖ Geopolitical Importance <ul style="list-style-type: none"> ➤ Mauritius is located near critical sea lanes of communication (SLOCs) in the Indian Ocean, crucial for maritime domain awareness and countering Chinese influence.



	<ul style="list-style-type: none"> ➤ Acts as a gateway to Africa and a trusted partner in the Indian Ocean Rim Association (IORA), the Commonwealth, and the Indian Ocean Commission. ❖ Economic Gateway <ul style="list-style-type: none"> ➤ Major route for FDI inflows to India (2nd largest source) due to bilateral tax treaties. ➤ Port modernisation supports the Sagarmala Project and regional trade connectivity. ❖ Soft Power & Diaspora Diplomacy <ul style="list-style-type: none"> ➤ Large Indian diaspora enhances goodwill and political alignment. ➤ Cooperation in AYUSH and Mission Karmayogi training expands India's soft power reach.
Challenges	<ul style="list-style-type: none"> ❖ Geopolitical Competition: China's BRI investments (e.g., Hambantota) in the region. ❖ Climate Vulnerability: Cyclones, sea-level rise, and coastal erosion threaten infrastructure. ❖ Economic Fragility: Tourism- and finance-dependent economy is sensitive to global shocks. ❖ Execution Delays: Past India-funded projects in islands have faced bureaucratic/logistical hurdles. ❖ Maritime Security Threats: Piracy, illegal fishing, and EEZ misuse require constant vigilance.
Way Forward	<ol style="list-style-type: none"> 1. Strengthen Maritime Partnership: Expand joint EEZ surveillance, hydrographic mapping, and Coast Guard training under SAGAR. 2. Climate-Resilient Infrastructure: Cyclone-proof designs, renewable energy, and mangrove restoration. 3. Accelerate Project Delivery: Digital monitoring dashboards, single-window clearances, and private sector participation. 4. Economic Diversification: Collaborate in fintech, digital public infrastructure (UPI, RuPay), and green hydrogen. 5. Cultural & People Diplomacy: Expand scholarships, cultural exchanges, and tourism circuits (e.g., Varanasi-Mauritius link).
Conclusion	<p>The India-Mauritius partnership is evolving into a comprehensive strategic alliance encompassing health, education, infrastructure, and maritime security. This initiative reflects India's Neighbourhood First policy in action, strengthening economic, cultural, and strategic ties in the Indian Ocean region.</p>

**Topic 2 - Saudi Arabia–Pakistan Defence Pact**

Syllabus	International Relations Neighbouring Countries
Context	Saudi Arabia and Pakistan signed a Strategic Mutual Defence Agreement (SMDA) in Riyadh, formalising decades of security cooperation. The pact commits both nations to treat aggression against one as aggression against both, signalling Riyadh's regional security recalibration.
About the Pact	<ul style="list-style-type: none"> ❖ Nature: Strategic Mutual Defence Agreement (SMDA) for mutual security and joint deterrence. ❖ Mutual Defence Clause: Attack on either country = attack on both. ❖ Scope: Includes conventional, advisory, and potentially nuclear deterrence. ❖ Strategic Context: Post-Israel–Qatar tensions; reflects Saudi push for regional self-reliance amid doubts over U.S. security guarantees. ❖ Economic Angle: Secures Saudi financial support for Pakistan's economy, aiding arms procurement and energy supply.
Implications	<ul style="list-style-type: none"> ❖ For India: <ul style="list-style-type: none"> ➤ Security Concerns: Saudi funding could accelerate Pakistan's military modernization (drones, missiles), altering India's security calculus. ➤ Strategic Watchfulness: Pact allows Pakistan to seek backing in future India–Pakistan conflicts. ➤ Limited Immediate Threat: Strong Indo–Saudi ties (trade USD 42.9 bn, defence cooperation) reduce the likelihood of overt anti-India tilt. ➤ Diplomatic Opportunity: Maintain engagement with Riyadh to ensure Arab neutrality in South Asian crises. ❖ Global/Regional: <ul style="list-style-type: none"> ➤ Security Realignment: Strengthens Saudi deterrence against Iran, Houthis, and unilateral actions by Israel. ➤ U.S. Angle: Reflects declining faith in American security guarantees; increases multipolarity in Gulf security. ➤ Nuclear Sensitivity: Raises questions about nuclear sharing; actual transfer unlikely due to Israeli red lines. ➤ Geopolitical Signalling: Shows Islamic solidarity; positions Pakistan as a pan-Islamic security provider.
Way Ahead for India	<ul style="list-style-type: none"> ❖ Deepen strategic engagement with Saudi Arabia through joint exercises (e.g., Al Mohed Al Hindi exercise), training, and intelligence sharing. ❖ Secure energy diplomacy deals, including crude oil and green hydrogen, for mutual interdependence. ❖ Monitor SMDA implementation, including Pakistani troop movements and practical footprint.

	<ul style="list-style-type: none"> ❖ Enhance Arabian Sea synergy via naval presence and maritime security cooperation. ❖ Leverage economic & diaspora links to stabilise Indo–Saudi ties.
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Topic 3 - India's Taliban Policy	
Syllabus	International Relations India & Neighborhood
Context	India is deepening engagement with the Taliban through cautious diplomacy - balancing security, regional stability, and economic outreach - while deliberately avoiding formal recognition of the Kabul regime.
India's Renewed Engagement	<ul style="list-style-type: none"> ❖ High-Level Visit: Taliban Foreign Minister Amir Khan Muttaqi's 8-day India visit marks the highest-level contact since 2021. ❖ Embassy Re-Establishment: India plans to reopen its Kabul Embassy, currently a "technical mission" overseeing aid and development. ❖ Policy Approach: India follows an "Engagement without Recognition" model - practical cooperation without political endorsement.
Engagement Without Recognition - Legal Basis	<ul style="list-style-type: none"> ❖ Distinct Concepts: <ul style="list-style-type: none"> ➤ Recognition → Accepts legitimacy of a regime (de jure). ➤ Engagement → Allows contact with de facto authority without legitimising it. ❖ Legal Framework: Under the Vienna Conventions (1961 & 1963), countries can maintain diplomatic contact with de facto regimes without formal recognition. ❖ Historical Precedent: <ul style="list-style-type: none"> ➤ India recognised the Soviet-backed Afghan regime in the 1980s - a stance it avoids repeating today. ➤ Taiwan: Interaction through the Taipei Economic and Cultural Centre. ➤ Myanmar: Continued embassy functioning under junta-appointed diplomats. ❖ Objective: Protect national interests while avoiding political endorsement of contested regimes.
Afghan Embassy in India - A Diplomatic Middle Path	<ul style="list-style-type: none"> ❖ Post-2021, the Afghan Embassy in New Delhi continued limited operations amid internal legitimacy tussles. ❖ India maintained neutrality - allowing diplomats to function without endorsing either faction. ❖ By 2025, Taliban officials confirmed de facto coordination between old Afghan diplomats and their own representatives.
UN Stand on Recognition	<ul style="list-style-type: none"> ❖ No UN Recognition: The Taliban's request for Afghanistan's UN seat has been rejected for four consecutive years (till 2024).

	<ul style="list-style-type: none"> ❖ UN Conditions: Inclusive governance, counter-terrorism commitment, and women's rights remain unmet.
Divergent Global Approaches	<ul style="list-style-type: none"> ❖ Recognised the Taliban: Russia (2025), China (2023), UAE, Uzbekistan. ❖ Upgraded Ties: Pakistan (2025) appointed an ambassador to Kabul despite strained ties. ❖ India's Stance: <ul style="list-style-type: none"> ➤ Non-Recognition (De Jure): India does not grant legitimacy to the Taliban's violent seizure of power in August 2021. ➤ Engagement (De Facto): India maintains functional diplomatic channels (recently upgrading its Kabul Technical Mission to a full embassy in 2025) to manage ground realities, humanitarian aid delivery, and security dialogue.
India's Pragmatic Strategy - 3 Pillars	<ul style="list-style-type: none"> ❖ Security & Counter-Terrorism Cooperation <ul style="list-style-type: none"> ➤ Taliban assured no shelter to anti-India groups. ➤ Condemned the Pahalgam terror attack (2025) - a key goodwill gesture. ➤ India views the Taliban today as distinct from Pakistan-backed terror outfits. ❖ Pakistan-Afghanistan Rift: A Strategic Opening <ul style="list-style-type: none"> ➤ Taliban refuses to recognise Durand Line; ties with TTP have strained relations with Pakistan. ➤ Declining Pakistan-Taliban trust gives India diplomatic space to engage Kabul independently. ❖ Economic & Developmental Leverage <ul style="list-style-type: none"> ➤ India invested \$3+ billion in Afghan projects (roads, health, education). ➤ Taliban now seeks Indian investment in mining, the TAPI gas pipeline, and Chabahar connectivity. ➤ India's development aid reinforces soft power and influence in the region.
Conclusion	<p>India's Taliban policy reflects strategic pragmatism - engaging for security and economic interests without legitimising the regime. By maintaining "contact without recognition," New Delhi safeguards its influence in Afghanistan while adapting to evolving regional geopolitics.</p>

**Topic 4 - India-U.K. Relations**

Syllabus	International Relations Bilateral Relations
Context	India and the United Kingdom have renewed their Comprehensive Strategic Partnership with major defense, trade, and education agreements during U.K. PM Keir Starmer's maiden visit to India.
Shared Vision & Strategic Convergence	<ul style="list-style-type: none"> ❖ Natural Partners: <ul style="list-style-type: none"> ➤ Both nations share values of democracy, freedom, and rule of law - forming the bedrock of their relations. ➤ Reiterated commitment to peaceful conflict resolution in Ukraine and Gaza, emphasizing diplomacy and dialogue. ❖ India's Global Role: <ul style="list-style-type: none"> ➤ The U.K. acknowledged India's rising global profile in the G20, the Commonwealth, and as a UNSC permanent seat aspirant. ➤ Shared goal of a rules-based international order and enhanced cooperation with the Global South. ❖ Indo-Pacific Cooperation: Both reaffirmed commitment to maritime security and freedom of navigation in the Indo-Pacific, countering regional assertiveness.
Defense Cooperation – A New Strategic Phase	<ul style="list-style-type: none"> ❖ Missile Procurement Deal: <ul style="list-style-type: none"> ➤ India signed a £350 million deal for Lightweight Multirole Missiles (LMMs) for the Indian Army. ➤ Built in Belfast, the deal lays the foundation for a Complex Weapons Partnership and defense tech transfer. ❖ Naval Collaboration: <ul style="list-style-type: none"> ➤ New cooperation on electric-powered naval engines worth £250 million. ➤ Promotes green and sustainable defense technologies. ❖ Military Training Pact: Indian Air Force (IAF) instructors to train at the Royal Air Force (RAF) in the U.K., enhancing joint military understanding.
Expanding Economic Linkages	<ul style="list-style-type: none"> ❖ Massive U.K. Trade Delegation: <ul style="list-style-type: none"> ➤ PM Starmer led a 126-member trade team, the largest ever from the U.K. ➤ Builds upon India-U.K. Free Trade Agreement (CETA, 2025), aimed at boosting trade, investment, and technology cooperation. ❖ Indian Investments in the U.K.: <ul style="list-style-type: none"> ➤ 64 Indian firms to invest £1.3 billion (₹15,430 crore), creating 7,000 jobs. ➤ Key sectors: Clean energy, mobility, engineering, technology, creative industries. ❖ Major Indian Investments: <ul style="list-style-type: none"> ➤ TVS Motor: £250 million in Solihull for EVs & Norton Motorcycles.



	<ul style="list-style-type: none"> ➤ Cyient: £100 million in semiconductors and clean energy (300 jobs). ➤ Muthoot Finance: £100 million to expand U.K. presence. ➤ Hero Motors: £100 million in e-mobility & aerospace. ❖ U.K. Investments in India: Rolls-Royce is exploring India as a production hub in aerospace and defense manufacturing.
Other Areas of Co-operation	<ul style="list-style-type: none"> ❖ Critical Minerals & Supply Chain Cooperation <ul style="list-style-type: none"> ➤ Industry Guild & Observatory: <ul style="list-style-type: none"> ■ India to establish an Industry Guild and Supply Chain Observatory with a satellite campus at ISM Dhanbad. ■ Aims to build resilient supply chains and support the G7 Mineral Security Partnership. ❖ Technological Synergy & Innovation <ul style="list-style-type: none"> ➤ Technology Security Initiative: <ul style="list-style-type: none"> ■ Collaboration on AI, advanced communications, and cyber technologies. ■ Combines India's scale & talent with the U.K.'s research & finance expertise. ➤ India-U.K. Fintech Corridor: A new corridor to connect startups, LSE, and GIFT City, fostering innovation and financial integration. ❖ Educational Collaboration <ul style="list-style-type: none"> ➤ Foreign Universities in India: <ul style="list-style-type: none"> ■ 9 U.K. universities to open Indian campuses — including the University of Southampton (Gurugram) under NEP 2020. ■ Boosts cross-border knowledge exchange and industry-academia linkages. ❖ Cultural Diplomacy & People-to-People Ties <ul style="list-style-type: none"> ➤ Bollywood-U.K. Collaboration: <ul style="list-style-type: none"> ■ PM Starmer announced that three Bollywood films will be shot in the U.K. from 2026. ■ British Airways to add a third Delhi-London flight; IndiGo to start Delhi-Manchester route.
Strategic Significance	<ul style="list-style-type: none"> ❖ For India: <ul style="list-style-type: none"> ➤ Strengthens Atmanirbhar Bharat and Make in India in defense. ➤ Expands global-standard higher education and innovation networks. ❖ For the U.K.: <ul style="list-style-type: none"> ➤ Boosts post-Brexit economic strategy through trade diversification. ➤ Attracts FDI, generates employment, and expands defense-industrial exports.
Way Forward	<ul style="list-style-type: none"> ❖ Finalize FTA implementation to unlock trade potential. ❖ Institutionalize the Complex Weapons Partnership for defense co-production.

	<ul style="list-style-type: none"> ❖ Promote joint R&D in AI, clean energy, and maritime technology. ❖ Expand education and skill linkages to meet workforce demands in both nations.
Conclusion	The 2025 India-U.K. accords signify a transformative step in bilateral ties, combining defense self-reliance, trade expansion, and educational exchange.

Topic 5 - Connectivity and Innovation Centre (CIC)	
Syllabus	International Relations International Cooperation
Context	India and the UK have jointly launched the Connectivity and Innovation Centre (CIC) to boost cooperation in 6G research, AI-driven telecom, and secure communications , with a joint investment of ₹282 crore over 4 years .
About the Connectivity and Innovation Centre (CIC)	<ul style="list-style-type: none"> ❖ Nature: A bilateral R&D and innovation platform for developing next-gen telecom and digital connectivity technologies. ❖ Purpose: Acts as a hub for advanced research, testing, and deployment in secure and inclusive digital systems.
Key Partners	<ul style="list-style-type: none"> ❖ India: Department of Telecommunications (DoT), Ministry of Communications. ❖ UK: Department of Science, Innovation and Technology (DSIT). ❖ Supported by: UK Research and Innovation (UKRI) under the UK-India Technology Security Initiative.
Objectives	<ul style="list-style-type: none"> ❖ Drive innovation in secure, inclusive, and resilient telecom networks. ❖ Advance 6G and AI-enabled communication systems. ❖ Strengthen collaboration under the India-UK 2035 Vision.
Significance	<ul style="list-style-type: none"> ❖ Boosts India-UK digital and innovation partnership. ❖ Accelerates 6G readiness and cyber-secure infrastructure. ❖ Expands digital inclusion through satellite-based connectivity in rural regions.

**Topic 6 - India-Canada Relations**

Syllabus	International Relations Bilateral Ties
Context	After years of diplomatic tension, India and Canada have taken major steps to restore bilateral relations , focusing on trade, technology, clean energy, and agricultural cooperation.
Historical Overview	<ul style="list-style-type: none"> ❖ Diplomatic relations were established in 1947, built on shared democratic values, Commonwealth ties, and strong people-to-people links. ❖ Early cooperation spanned education, agriculture, nuclear energy, and trade. ❖ Canada has been a major investor through pension funds in India's infrastructure and renewable sectors.
Pillars of Cooperation (The Potential)	<ul style="list-style-type: none"> ❖ Economic Relations <ul style="list-style-type: none"> ➤ Bilateral Trade (2024): USD 33.9 billion. (India - Canada's seventh-largest goods and services trading partner) ➤ Canadian Pension Funds: Pledged \$75+ billion - among India's top foreign investors. ❖ Indian Diaspora & Cultural Linkages <ul style="list-style-type: none"> ➤ 1.6 million+ Indian-origin Canadians, shaping politics, academia, and business. ➤ India is Canada's top source of international students (300,000+). ➤ Strong cultural exchanges deepen mutual understanding and economic cooperation. ❖ Energy & Resources <ul style="list-style-type: none"> ➤ Canada is a crucial supplier of Uranium to India's nuclear energy program (under the 2010 Civil Nuclear Cooperation Agreement) and is a potential source for critical minerals, natural gas, and clean technologies. ❖ Strategic/Geopolitical <ul style="list-style-type: none"> ➤ Both are members of the G20 and the Commonwealth. Canada's Indo-Pacific Strategy designates India as a vital partner for promoting regional stability and rules-based order, aligning with India's interests. ❖ Agriculture: Canada is a major supplier of pulses (lentils/peas) and potash/fertilizers to India.
Major Challenges and Diplomatic Crisis	<ul style="list-style-type: none"> ❖ Diaspora Politics: <ul style="list-style-type: none"> ➤ India accuses the Canadian government of allowing Khalistani elements free rein due to "vote bank politics." ➤ Diplomatic Friction and mutual accusations (e.g., India's concern over attacks on Hindu temples).



	<ul style="list-style-type: none"> ❖ Economic Disruption <ul style="list-style-type: none"> ➤ Talks for the Comprehensive Economic Partnership Agreement (CEPA) and the Early Progress Trade Agreement (EPTA) were officially paused/stalled. ❖ Recent Diplomatic Strain (2023) <ul style="list-style-type: none"> ➤ Relations soured after PM Justin Trudeau's allegations linking India to Khalistani leader Hardeep Singh Nijjar's killing. ➤ India dismissed the claims as "absurd," leading to diplomatic downgrades and a trade freeze. ➤ Relations began to improve after PM Mark Carney's government took office, stressing mutual respect and sovereignty.
<p style="text-align: center;">Recent Developments (2025 Talks)</p>	<ul style="list-style-type: none"> ❖ High-level talks between EAM S. Jaishankar and FM Anita Anand in New Delhi (Oct 13, 2025) marked the revival of ties. ❖ Discussions covered trade, investment, clean energy, AI, agriculture, and civil nuclear cooperation.
<p style="text-align: center;">Key Agreements & Announcements</p>	<ul style="list-style-type: none"> ❖ Relaunch of Trade Talks: <ul style="list-style-type: none"> ➤ Restarting ministerial-level dialogue for a new Comprehensive Economic Partnership Agreement (CEPA). ➤ Aims to replace stalled talks and align with India's new FTA model (UAE, EFTA). ❖ Energy & Clean Tech Cooperation: <ul style="list-style-type: none"> ➤ Revival of Canada-India Ministerial Energy Dialogue (CIMED). ➤ Focus: Green hydrogen, CCUS, biofuels, electric mobility, LNG trade, and critical mineral supply chains. ❖ Civil Nuclear & Minerals Collaboration <ul style="list-style-type: none"> ➤ Continued discussions on Canadian uranium supply for India's clean energy goals. ➤ Launch of Critical Minerals Annual Dialogue (Toronto, March 2026). ❖ Agriculture & Food Systems <ul style="list-style-type: none"> ➤ Joint work on climate-resilient farming, agri-value chains, and nutritional security. ➤ Focus on agri-waste recycling and sustainable food systems. ❖ Science, Technology & AI Partnership <ul style="list-style-type: none"> ➤ Relaunch of Joint S&T Cooperation Committee for AI, cybersecurity, and digital innovation. ➤ Canada invited to India's AI Impact Summit (Feb 2026). ➤ Collaboration on Digital Public Infrastructure (DPI) and inclusive AI projects.
<p style="text-align: center;">Diplomatic & Strategic Significance</p>	<ul style="list-style-type: none"> ❖ Restores mutual trust and acknowledges India's concerns on Khalistan extremism.

	<ul style="list-style-type: none"> ❖ An invitation was extended to PM Mark Carney for an official visit to India (2026). ❖ Reaffirms commitment to sovereignty, respect, and rule-based cooperation.
Broader Global Context	<ul style="list-style-type: none"> ❖ The revival comes amid geopolitical shifts and Indo-Pacific realignments. ❖ Both nations - G20 and Commonwealth members - share goals in multilateral reform, climate action, and supply chain resilience. ❖ Strengthened ties could boost trade diversification, technology innovation, and strategic stability across the Indo-Pacific.
Conclusion	<p>The revival of India-Canada relations marks a reset in diplomacy, focusing on cooperation over confrontation. By deepening ties in trade, tech, and clean energy, both nations aim to rebuild trust and shape a more resilient, democratic, and innovation-driven global partnership.</p>

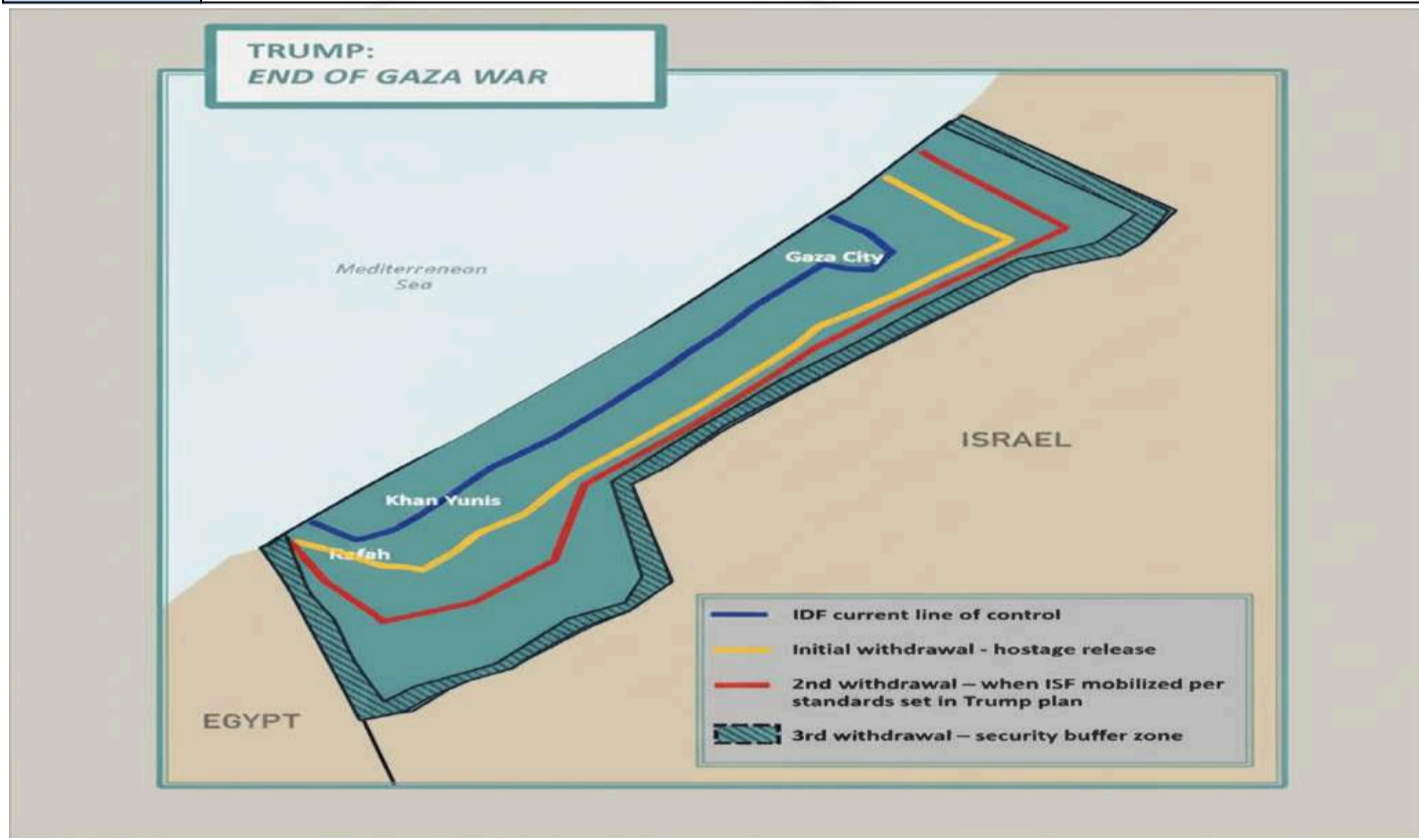
Topic 7 - H-1B Visa	
Syllabus	International Relations Diaspora Migration Policy
Context	The White House has announced a \$100,000 entry fee for new H-1B visa holders from September 21, 2025.
What is H-1B visa?	<ul style="list-style-type: none"> ❖ H-1B visa is a temporary, non-immigrant visa issued by the U.S. that allows American employers to hire foreign professionals in specialty occupations requiring theoretical or technical expertise (primarily STEM, IT, and healthcare). ❖ Valid for 3 years, extendable to 6 years; pathway to Green Card.
Key Changes in H-1B Fee	<ul style="list-style-type: none"> ❖ Fee applies only to new entrants, not to extensions or status changes of existing H-1B holders. ❖ Employers must pay \$100,000 upfront for any new petition; without payment, consular stamping is denied. ❖ The Secretary of Homeland Security may waive fees for individuals, sectors, or companies in the national interest. ❖ Policy is effective for 12 months, after which the review may decide continuation.
US Immigration Politics	<ul style="list-style-type: none"> ❖ Immigration now a major voter concern (2.1% in 2012 → 14.6% in 2024). ❖ MAGA Republicans frame skilled migration as a job and wage threat to American workers. ❖ Critics claim H-1B visas allow tech firms to hire mid-level staff at lower salaries; 70% of Indian petitions FY2023 < \$100,000 vs US median \$104,420.
Industry Perspective	<ul style="list-style-type: none"> ❖ H-1B visas fill STEM skill gaps in the US; domestic STEM graduates are far fewer (US: 820,000 vs India: 2.55M, China: 3.57M).

	<ul style="list-style-type: none"> ❖ Essential for Big Tech, IT services, consulting, and academia.
India: Epicentre of Impact	<ul style="list-style-type: none"> ❖ India accounts for 71% of H-1B approvals (FY2024). ❖ Higher fees threaten the OPT → H-1B transition for young Indian STEM graduates in the U.S. ❖ Travel disruptions are likely for families of current H-1B holders. ❖ Rising costs make on-site delivery by Indian IT firms & Global Capability Centres (GCCs) expensive → pushing a shift toward offshore project delivery.
Significance for India	<ul style="list-style-type: none"> ❖ Economic Engine: Pillar of India's IT export model, enabling firms like TCS, Infosys, Wipro to serve U.S. clients on-site. ❖ Remittances: H-1B professionals send ≈\$32 billion (2023-24) from the U.S., forming the largest share of India's \$125 billion remittances. ❖ Skill & Brain Gain: Exposure to AI, cloud, quantum tech; restrictions may cause Reverse Brain Drain, boosting India's startup ecosystem. ❖ Soft Power: Builds people-to-people ties and deepens the India-U.S. strategic tech partnership (iCET).

Topic 8 - Gaza Peace Plan							
Syllabus	International Relations						
Context	US President Donald Trump's 20-point Gaza Peace Plan has entered a critical phase after the successful hostage-detainee exchange at Sharm El-Sheikh.						
The Gaza Peace Deal	<ul style="list-style-type: none"> ❖ The "Gaza Peace Plan" refers to the multi-phase framework brokered by international mediators (primarily the US, Egypt, and Qatar) to end the two-year Israel-Hamas war that began in October 2023. ❖ Aim: To achieve a full cessation of hostilities, the release of all hostages, and ultimately a pathway for post-war governance and reconstruction in Gaza. ❖ Mediators: USA, Egypt, Turkey and Qatar played a central role. ❖ Key Features of the 20-Point Plan <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #fff9c4;"> <th style="width: 15%; padding: 5px;">Phase</th> <th style="padding: 5px;">Highlights</th> </tr> </thead> <tbody> <tr> <td style="background-color: #e1eef6; text-align: center; vertical-align: middle; padding: 5px;">Phase 1</td> <td style="padding: 5px;"> Immediate ceasefire and humanitarian actions <ul style="list-style-type: none"> ● Immediate ceasefire began on October 10, 2025, with IDF repositioning troops. ● Return of 48 hostages (alive and deceased), release of Palestinian prisoners (2000), and deployment of U.S. troops for aid coordination. </td> </tr> <tr> <td style="background-color: #e1eef6; text-align: center; vertical-align: middle; padding: 5px;">Phase 2</td> <td style="padding: 5px;">Demilitarisation and security measures</td> </tr> </tbody> </table>	Phase	Highlights	Phase 1	Immediate ceasefire and humanitarian actions <ul style="list-style-type: none"> ● Immediate ceasefire began on October 10, 2025, with IDF repositioning troops. ● Return of 48 hostages (alive and deceased), release of Palestinian prisoners (2000), and deployment of U.S. troops for aid coordination. 	Phase 2	Demilitarisation and security measures
Phase	Highlights						
Phase 1	Immediate ceasefire and humanitarian actions <ul style="list-style-type: none"> ● Immediate ceasefire began on October 10, 2025, with IDF repositioning troops. ● Return of 48 hostages (alive and deceased), release of Palestinian prisoners (2000), and deployment of U.S. troops for aid coordination. 						
Phase 2	Demilitarisation and security measures						



- Deployment of **international stabilisation force** (U.S., Arab, European personnel).
 - Training of a **Palestinian police force** for long-term peace enforcement.
- Phase 3 Governance and reconstruction**
- Formation of **transitional administration** led by **Palestinian technocrats**, supervised by an **international body** to administer Gaza temporarily.
 - Launch of **international reconstruction fund** and **UN-led humanitarian corridor** to rebuild Gaza's infrastructure.
 - Final status talks on **two-state solution**, borders, and Jerusalem.



Post-War Challenges Ahead

- ❖ **Reconstruction:** Gaza's infrastructure lies in ruins; rebuilding homes, hospitals, and utilities is a priority.
- ❖ **Governance Vacuum:** The peace plan offers **no clarity** on who will govern Gaza - neither Hamas nor the Palestinian Authority has a defined role.
- ❖ **Aid and Rehabilitation:** Ensuring aid flow and resettling displaced civilians remain daunting tasks.
- ❖ **Statehood Ambiguity:** The plan vaguely references Palestinian statehood without a clear roadmap.

Sharm El-Sheikh Peace Summit

- ❖ **Participants:** Global leaders gathered in Egypt but lacked a unified strategy.
- ❖ **Palestinian Exclusion:** Palestinians were **not included** in the main negotiations, raising legitimacy concerns.
- ❖ **Criticism:** Experts fear the summit may become **a political show**, not a genuine peace effort.



	<ul style="list-style-type: none"> ❖ Core Issues Ignored: Occupation, self-determination, and long-term sovereignty remain unaddressed.
Fragile Prospects for Peace	<ul style="list-style-type: none"> ❖ International Stabilization Force: Planned deployment of Arab-Muslim coalition troops depends on Hamas's cooperation, which remains uncertain. ❖ Temporary Truce: Without Hamas disarmament, the current calm may only be a short-lived ceasefire. ❖ Unresolved Governance: Absence of a viable local administration could reignite tensions post-summit.
Trump's Leverage Over Netanyahu	<ul style="list-style-type: none"> ❖ Unprecedented Control: Trump has compelled Netanyahu to follow his directives - e.g., halting an Iran strike mid-air and apologizing to Qatar. ❖ Shift in Power Balance: Unlike earlier administrations, Trump wields direct influence over Israeli actions. ❖ Diplomatic Breakthroughs: Enabled earlier hostage releases and enforced tactical restraint during the war.
Netanyahu's Political Calculus	<ul style="list-style-type: none"> ❖ Domestic Distraction: The conflict diverts attention from Netanyahu's corruption trials and judicial crisis. ❖ Risk of Peace: A permanent ceasefire may spark public outrage over security lapses (Oct 7 attacks) and fuel demands for his resignation. ❖ Possible Withdrawal: Analysts warn Netanyahu could later accuse Hamas of violations to exit the deal politically unscathed.
India's Stand on the Gaza Ceasefire	<ul style="list-style-type: none"> ❖ Prime Minister Modi: Welcomed the release of hostages and lauded Trump's "unwavering peace efforts." ❖ MEA Statement: Reaffirmed India's support for a negotiated two-State solution and dialogue-driven peace. ❖ Acknowledgment: India praised Egypt and Qatar for mediating the ceasefire deal.

**Topic 9 - International Solar Alliance**

Syllabus	International Relations Organizations
Context	India will host the 8th International Solar Alliance (ISA) Assembly from October 27-30, 2025 , at Bharat Mandapam, New Delhi , reaffirming its leadership in global solar diplomacy and climate action.
About the International Solar Alliance	<ul style="list-style-type: none"> ❖ A global intergovernmental organisation promoting solar energy deployment to ensure energy access, security, and climate resilience. ❖ Acts as a collaborative platform for governments, industries, and financial institutions to accelerate solar adoption, especially in developing nations.
Launch & Origin	<ul style="list-style-type: none"> ❖ Launched: 2015 during COP21, Paris. ❖ Joint Initiative: Between India and France. ❖ Headquarters: Gurugram, India - making it the first international organisation headquartered in India.
Membership and Structure	<ul style="list-style-type: none"> ❖ Total Members & Signatories: 124 (as of 2025). ❖ Full Members: 90+ countries. ❖ Open Membership: Since 2020, all UN member states can join.
Core Aims & Objectives	<ul style="list-style-type: none"> ❖ Investment Target: Mobilise USD 1 trillion in solar investments by 2030. ❖ Energy Access: Deliver clean solar power to 1 billion people. ❖ Capacity Target: Enable 1,000 GW of global solar capacity. ❖ Equity Focus: Ensure affordable and sustainable energy access for LDCs (Least Developed Countries) and SIDS (Small Island Developing States).
Functions and Key Initiatives	<ul style="list-style-type: none"> ❖ Policy & Advocacy: <ul style="list-style-type: none"> ➤ Assists nations in solar policy formulation through “Ease of Doing Solar” analytics. ➤ Publishes annual solar investment reports to track progress and trends. ❖ Programmatic Support: <ul style="list-style-type: none"> ➤ Implements and scales solar projects in agriculture, health, transport, and energy sectors. ➤ Promotes replication of India’s PM-KUSUM and PM Surya Ghar models in Africa and island nations. ❖ Financing Mechanisms: <ul style="list-style-type: none"> ➤ Operates Africa Solar Facility (ASF) from Ahmedabad to offer risk guarantees and attract private capital. ➤ Targets \$200 million by 2026 to mobilize \$2-4 billion in solar investments. ❖ Capacity Building: Runs STAR-C (Solar Technology and Application Resource Centers) to train engineers, entrepreneurs, and policymakers.

	<ul style="list-style-type: none"> ❖ Knowledge & Collaboration: Partners with MDBs (Multilateral Development Banks), DFIs (Development Finance Institutions), the private sector, and civil society to share data, technology, and best practices for affordable solar expansion.
Significance for India and the World	<ul style="list-style-type: none"> ❖ Strengthens India's image as a global solar leader and climate champion. ❖ Promotes South-South cooperation in clean energy. ❖ Supports UN Sustainable Development Goals (SDG 7 – Affordable & Clean Energy). ❖ Enhances energy security and green transition in the Global South.

Topic 10 - Power of Siberia 2 Pipeline	
Syllabus	International Relations Agreements
Context	The Power of Siberia 2 pipeline is a proposed mega natural gas project linking Russia and China via Mongolia.
What is Power of Siberia 2?	<ul style="list-style-type: none"> ❖ Definition: A natural gas pipeline planned to connect Western Siberia (Russia) → Mongolia, → China. ❖ Expansion: Successor to Power of Siberia 1 (operational since 2019). ❖ Significance: Aims to diversify Russian gas exports and deepen Russia-China energy ties.
Nations Involved	<ul style="list-style-type: none"> ❖ Russia: Gas supply from the Yamal Peninsula. ❖ Mongolia: Transit corridor. ❖ China: Final consumer and strategic partner.
Key Features	<ul style="list-style-type: none"> ❖ Length: Approx. 6,700 km (Yamal → Lake Baikal → Mongolia → China). ❖ Capacity: About 50 billion cubic metres (bcm) per year. ❖ Scale: Designed as one of the world's longest pipelines, enhancing energy connectivity across Asia.

Topic 11 - Rare Earth Metals	
Syllabus	International Relations Resources
Context	Rare earth elements have emerged as the new battleground in the US-China trade war , as Beijing tightens export controls and Washington retaliates with steep tariffs.
What Are Rare Earths?	<ul style="list-style-type: none"> ❖ Definition: A group of 17 metallic elements (lanthanum–lutetium + scandium + yttrium) known for high conductivity, density, and thermal resistance. ❖ Types: Classified into light and heavy rare earths. ❖ Applications: Vital for electrical vehicles (EVs), smartphones, wind turbines, semiconductors, defence tech, and MRI machines. ❖ Challenge: Found in low concentrations, extraction and refining are costly and highly polluting, limiting global producers.
China's Global Dominance	<ul style="list-style-type: none"> ❖ Mining: Controls 60% of global production. ❖ Processing: Handles over 90% of global refining capacity (IEA). ❖ Strategy: <ul style="list-style-type: none"> ➢ Built a complete supply chain monopoly through decades of investment. ➢ Uses export restrictions as a geopolitical weapon, especially on heavy rare earths (terbium, dysprosium). ❖ Chinese Export Controls (2025) <ul style="list-style-type: none"> ➢ New Restrictions: Added 5 more elements - holmium, erbium, thulium, europium, ytterbium - and refined materials to the export control list. ➢ Technology Clause: Foreign firms using Chinese rare earths must comply with Beijing's export rules, tightening control over global supply chains. ❖ Trade Weapon: China's export curbs counter US tariffs under Donald Trump, making rare earths a key pressure point in the trade war.
Global Reserves, Limited Alternatives	<ul style="list-style-type: none"> ❖ Reserves: Found in Australia, Brazil, and India, but production remains low due to: <ul style="list-style-type: none"> ➢ High environmental costs. ➢ Lack of refining infrastructure. ❖ Result: Continued global dependence on China for critical minerals.
India's Position and Exposure	<ul style="list-style-type: none"> ❖ Low Current Impact: India's dependence on rare earth imports is modest. ❖ Imported 2,270 tonnes (2023-24), with 65% from China, 10% from Hong Kong. ❖ Affected Sectors: EVs and electronics most impacted by earlier Chinese curbs. ❖ Production Capacity: <ul style="list-style-type: none"> ➢ State-run IREL Ltd produces ~10,000 tonnes/year. ➢ China's output stands at ~200,000 tonnes (2023) - 20x higher.
India's Initiatives and	<ul style="list-style-type: none"> ❖ Exploration: 7 seabed blocks in the Andaman Sea auctioned for rare earth mining. ❖ New Projects:

Expansion Plans	<ul style="list-style-type: none"> ➤ Rare Earth Theme Park (pilot R&D plants). ➤ Permanent Magnet Park, Visakhapatnam. ➤ Rare Earth & Titanium Park, Bhopal. ➤ Goal: Strengthen India's strategic autonomy and industrial capacity in critical minerals.
Global Diversification Efforts	<ul style="list-style-type: none"> ❖ United States: Preparing to stockpile deep-sea metals from the Pacific to reduce China's dependency. ❖ Japan: Rebuilt supply chains post-2010 Chinese curbs - a model for India and Western economies. ❖ Allied Push: QUAD and Western nations accelerating critical mineral partnerships beyond China.

Topic 12 - Wassenaar Arrangement (WA)

Syllabus	International Relations Grouping
What is it?	The Wassenaar Arrangement (WA) is a multilateral export control regime (MECR) aimed at regulating trade in conventional arms and dual-use technologies to promote global peace, transparency, and stability.
About Wassenaar Arrangement	<ul style="list-style-type: none"> ❖ Established: 1996 (replacing the Cold War-era Coordinating Committee for Multilateral Export Controls - CoCom). ❖ Nature: It is a voluntary, non-binding arrangement, not a treaty. Decisions are taken by consensus among the Participating States. ❖ Headquarters: Vienna, Austria. ❖ Members: 42 countries (including India, which joined in 2017, China is not a member). ❖ Purpose: <ul style="list-style-type: none"> ➤ Promote transparency in arms and dual-use technology transfers. ➤ Prevent destabilizing accumulations of weapons or sensitive tech. ➤ Encourage responsible export practices among member states.
How It Works	<ul style="list-style-type: none"> ❖ Information Exchange: Members share data on exports and denials of arms and sensitive technologies to non-member states. ❖ Control Lists: Maintains and updates detailed lists of chemicals, technologies, materials, and equipment with military significance. ❖ Objective: Prevent transfer of items that could threaten international peace or security.

**India's Membership and Significance**

India's membership in the WA is a major diplomatic success, strengthening its standing as a **responsible nuclear power** despite being a non-signatory to the Non-Proliferation Treaty (NPT).

Strategic Benefit for India	Explanation
Access to Critical Technology	Eases the procurement process for critical dual-use technologies and materials needed for India's defence, space, and digital sectors (e.g., under the Make in India initiative).
Global Non-Proliferation Credibility	Strengthens India's credentials for membership in the Nuclear Suppliers Group (NSG) , where its entry has been consistently blocked by China.
Export Control Alignment	India has harmonised its domestic SCOMET (Special Chemicals, Organisms, Materials, Equipment and Technologies) list with the WA Control Lists, aligning its national export control policy with global standards.
Strategic Advantage	India is now a member of three of the four major Multilateral Export Control Regimes (MTCR, Wassenaar, and Australia Group), which gives it a strategic edge in global technology governance.

Topic 13 - Mutual Legal Assistance Treaty (MLAT)

Syllabus	Governance International Relations
Context	India recently invoked the Mutual Legal Assistance Treaty (MLAT) with Singapore in connection with a high-profile criminal investigation.
About MLAT	<ul style="list-style-type: none"> ❖ Definition: A formal mechanism for cooperation between countries to prevent, investigate, and prosecute crimes. ❖ Objective: To ensure that criminals cannot evade justice due to evidence being located in another jurisdiction. ❖ Framework: Operates through <ul style="list-style-type: none"> ➢ Bilateral treaties or agreements, ➢ Multilateral conventions, or ➢ Reciprocal assurances.
India's MLAT Network	<ul style="list-style-type: none"> ❖ India has signed MLATs with 45+ countries for criminal matters. ❖ Nodal Ministry: Ministry of Home Affairs (MHA). ❖ Provides legal basis for information sharing, extradition support, and evidence collection across borders.

**Economy****Topic 1 - Stablecoin**

Syllabus	Monetary Policy Central bank Currency																
Context	With cryptocurrency innovations reshaping global finance, the Union Finance Minister stressed the need for nations to “prepare to engage with stablecoins.”																
What is Stablecoin?	<ul style="list-style-type: none"> ❖ A cryptocurrency designed to maintain a stable value relative to an underlying asset. Commonly backed by fiat currencies (like USD, INR), commodities (like gold), or algorithms. ❖ Unlike volatile cryptocurrencies such as Bitcoin, stablecoins provide price stability, making them suitable for transactions and commerce. 																
Types of Stablecoins	<ul style="list-style-type: none"> ❖ Fully Reserved Stablecoins <ul style="list-style-type: none"> ➤ Definition: Backed one-to-one by liquid assets held in reserve by the issuer. ➤ Mechanism: Each coin corresponds to an underlying asset (fiat or government securities), ensuring the holder can redeem it at par value, maintaining price stability. ❖ Algorithmic Stablecoins <ul style="list-style-type: none"> ➤ Definition: Not backed by reserves; value maintained through automated rules. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #fff9c4;">Type</th> <th style="background-color: #fff9c4;">Backing Mechanism</th> <th style="background-color: #fff9c4;">Example</th> </tr> </thead> <tbody> <tr> <td style="background-color: #d9e1f2;">Fiat-backed</td> <td>Pegged to currency reserves (USD, EUR)</td> <td>USDT (Tether), USDC</td> </tr> <tr> <td style="background-color: #d9e1f2;">Commodity-backed</td> <td>Pegged to assets like gold</td> <td>PAX Gold</td> </tr> <tr> <td style="background-color: #d9e1f2;">Crypto-backed</td> <td>Collateralized by other cryptocurrencies</td> <td>DAI (backed by Ethereum)</td> </tr> <tr> <td style="background-color: #d9e1f2;">Algorithmic</td> <td>Uses smart contracts to control supply</td> <td>Terra (UST – collapsed in 2022)</td> </tr> </tbody> </table>		Type	Backing Mechanism	Example	Fiat-backed	Pegged to currency reserves (USD, EUR)	USDT (Tether), USDC	Commodity-backed	Pegged to assets like gold	PAX Gold	Crypto-backed	Collateralized by other cryptocurrencies	DAI (backed by Ethereum)	Algorithmic	Uses smart contracts to control supply	Terra (UST – collapsed in 2022)
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**Topic 2 - Payments Regulatory Board (PRB)**

Syllabus	Economy Financial Sector Reforms
Context	The Reserve Bank of India (RBI) has recently set up a six-member Payments Regulatory Board (PRB) to strengthen oversight and governance of India's rapidly expanding payment ecosystem.
About Payments Regulatory Board (PRB)	<ul style="list-style-type: none"> ❖ Legal Backing: Established under the Payment and Settlement Systems Act, 2007. ❖ Replacement: Replaces the Board for Regulation and Supervision of Payment and Settlement Systems (BPSS) - earlier a sub-committee under RBI's Central Board. ❖ Support System: Assisted by the Department of Payment and Settlement Systems (DPSS), which reports directly to the PRB.
Composition	<ul style="list-style-type: none"> ❖ Chairperson: RBI Governor (Ex officio) ❖ Ex officio Members: <ul style="list-style-type: none"> ➤ Deputy Governor (in charge of Payment Systems) ➤ Executive Director (Payment and Settlement Systems) ❖ Government Nominees: 3 members nominated by the Central Government ❖ Permanent Invitee: Principal Legal Adviser of RBI ❖ Meetings: Minimum twice a year. ❖ Decision-making: Decisions are taken by a majority vote. In case of a tie, the Chairperson (or Deputy Governor, in their absence) has the casting vote.
Functions	<ul style="list-style-type: none"> ❖ Regulates and supervises all payment systems - electronic, non-electronic, domestic, and cross-border. ❖ Ensures safety, security, efficiency, and stability in payment and settlement mechanisms. ❖ Promotes innovation and inclusion in the digital payment ecosystem.

**Topic 3 - Presumptive Taxation**

Syllabus	Economy Taxation
Context	NITI Aayog's first Tax Policy Working Paper (2025) proposed an optional presumptive taxation regime for foreign firms to reduce litigation, simplify compliance, and provide certainty in Permanent Establishment (PE) disputes, boosting India's investment climate.
What is Presumptive Taxation?	<ul style="list-style-type: none"> ❖ A simplified tax scheme allows eligible taxpayers (businesses, professionals, transporters) to declare their taxable income at a fixed statutory percentage of their gross receipts or turnover, instead of calculating actual profit by maintaining detailed books of accounts. ❖ Aim: Certainty, reduced litigation, simplified compliance, and predictable revenue. ❖ Existing usage in India: Shipping (Sec. 44B), Oil & Gas services (44BB), Airlines (44BBA), and small businesses (44AD/44ADA).
Why Needed in India?	<ul style="list-style-type: none"> ❖ Litigation-heavy regime: Permanent establishment disputes take over a decade to resolve (e.g., Hyatt International, 2025). ❖ Ambiguity: Broad interpretation of "business connection" and Significant Economic Presence (SEP) deters FDI. ❖ Retrospective tax legacy: e.g. Vodafone case.
Key Features of NITI Aayog Proposal	<ul style="list-style-type: none"> ❖ Codification of permanent establishment and profit attribution aligned with global norms. ❖ Presumptive rates calibrated to historical sector profit margins. ❖ Use of Advance Pricing Agreements (APA) and Mutual Agreement Procedures (MAP) to reduce disputes. ❖ Safe harbour for the digital economy – special treatment for high-profit, user-intensive platforms. ❖ Capacity building for tax officers to ensure consistent application. ❖ Public consultation mechanisms to build investor trust.
Expected Benefits	<ul style="list-style-type: none"> ❖ Reduced litigation: Faster dispute resolution, easing court pressure. ❖ Investor confidence: Predictable taxation encourages long-term FDI. ❖ Revenue safeguard: Ensures minimum tax collection, even from low-profit or digital firms. ❖ Ease of Doing Business: Simplified compliance aligns with Make in India objectives. ❖ Supports MSMEs and self-employed professionals.

**Topic 4 - Trade and Economic Partnership Agreement (TEPA)**

Syllabus	Economy External Sector Economic Integration
Context	From 1st October 2025, India's first Free Trade Agreement (FTA) with four developed European nations - under the TEPA framework - will come into effect.
About TEPA	<ul style="list-style-type: none"> ❖ Nature: Comprehensive FTA linking trade, investment, and job creation. ❖ Significance: First Indian FTA with developed EFTA countries. ❖ Timeline: Signed on 10th March 2024 in New Delhi; operational from 1st October 2025. ❖ Members: Switzerland, Norway, Iceland, Liechtenstein (Switzerland is India's largest EFTA trade partner).
Objectives	<ul style="list-style-type: none"> ❖ Investment & Employment: Attract \$100 bn FDI and create 1 million direct jobs in manufacturing and services. ❖ Market Access: Expand Indian goods and services in EFTA markets. ❖ Sustainable Development: Promote green growth, technology transfer, and skill development.
Key Features of TEPA	<ul style="list-style-type: none"> ❖ Investment & Job Creation <ul style="list-style-type: none"> ➤ EFTA commits \$100 bn FDI over 15 years. ➤ Direct employment generation in India's manufacturing and services sectors. ❖ Market Access for Goods <ul style="list-style-type: none"> ➤ Zero-duty access on 92.2% tariff lines (99.6% of India's exports). ➤ Enhanced opportunities for Indian exporters across sectors. ❖ Services & Mobility <ul style="list-style-type: none"> ➤ Commitments across 100+ sub-sectors, including IT, education, audio-visual, and business services. ➤ Mutual Recognition Agreements (MRAs): Nursing, architecture, chartered accountancy. ➤ Facilitates Mode 1 (digital delivery), Mode 3 (commercial presence), and Mode 4 (personnel mobility). ❖ Intellectual Property Rights (IPR) <ul style="list-style-type: none"> ➤ Adopts TRIPS+ standards with protections for generic medicines. ➤ Prevents patent evergreening while safeguarding innovation. ❖ Sustainable Development <ul style="list-style-type: none"> ➤ Encourages green growth, social inclusion, and environmental protection. ➤ Promotes technology collaboration in renewable energy, precision engineering, and health sciences.

**Topic 5 - External Commercial Borrowings (ECBs)**

Syllabus	Economy External Sector Finance
Context	The Reserve Bank of India (RBI) is set to release a draft framework to simplify ECB rules , aiming to expand eligibility for borrowers and lenders.
What are External Commercial Borrowings (ECBs)?	<ul style="list-style-type: none"> ❖ Definition: Commercial loans raised by eligible Indian entities from recognised non-resident entities in foreign currency or INR. ❖ Legal Framework: Governed under the Foreign Exchange Management Act (FEMA), 1999, and RBI regulations. ❖ ECBs are recorded in the Capital Account of India's Balance of Payments (BoP).
Organisations Involved	<ul style="list-style-type: none"> ❖ RBI: Regulates the ECB framework, issues guidelines, and monitors compliance. ❖ Borrowers: Indian corporates, PSUs, NBFCs, eligible trusts, and institutions. ❖ Lenders: International banks, multilateral agencies, export credit agencies, foreign equity holders.
Aim of ECBs	<ul style="list-style-type: none"> ❖ Provide access to foreign capital at competitive rates. ❖ Diversify funding sources beyond domestic markets → Reduces pressure on the domestic banking system. ❖ Finance infrastructure, expansion, and long-term projects.
Key Features	<ul style="list-style-type: none"> ❖ Routes: <ul style="list-style-type: none"> ➤ Automatic Route: Direct borrowing if standard conditions are met; approval via Authorized Dealer (AD) Category-I banks. ➤ Approval Route: Requires RBI clearance if conditions do not meet automatic route norms. ❖ Basic Conditions: <ul style="list-style-type: none"> ➤ Minimum maturity period for loans (e.g., 3 years for most ECBs).. ➤ Cap on borrowing costs (interest + charges). ➤ Restrictions on the usage of funds. ➤ Mandatory reporting to RBI through the Loan Registration Number (LRN) and Form ECB. ❖ Permitted Uses: <ul style="list-style-type: none"> ➤ Funding capital expenditure, large projects, or infrastructure. ➤ Refinancing existing loans. ❖ Prohibited Uses: Real estate business, stock market investments, or speculative activities.

**Topic 6 - Workers' Rights**

Syllabus	Economy Governance Labour Reforms
Context	Recent fatal industrial accidents across India have reignited debates on weakening labour protections and the erosion of workers' rights under the new labour codes.
Industrial Accidents & Rising Concerns	<ul style="list-style-type: none"> ❖ Major Accidents (2025): <ul style="list-style-type: none"> ➤ Sigachi Industries chemical explosion (Telangana – June) ➤ Gokulesh Fireworks blast (Sivakasi – July) ➤ Ennore Thermal Power Station collapse (Chennai – September). ❖ Global Data: According to the British Safety Council, India accounts for 1 in 4 workplace fatalities worldwide - though underreporting (especially among contract workers) means the actual number is higher.
Causes Behind Industrial Accidents	<ul style="list-style-type: none"> ❖ Negligence Over Human Error: <ul style="list-style-type: none"> ➤ Accidents often result from managerial neglect, outdated machinery, and poor maintenance. ➤ Example: In the Telangana reactor explosion, equipment ran at double the permissible temperature, no alarms or safety officers were active, and no ambulance was available. ❖ ILO's Observation: <ul style="list-style-type: none"> ➤ Most industrial disasters stem from cost-cutting practices and management negligence, not chance events. ➤ Employers frequently blame "human error," ignoring unsafe hours, overwork, and poor wages that drive fatigue and risk-taking.
Evolution of Labour Protection in India	<ul style="list-style-type: none"> ❖ Colonial Roots: Factories Act, 1881 – First attempt to regulate working conditions. ❖ Post-Independence Framework: <ul style="list-style-type: none"> ➤ Factories Act, 1948 – Comprehensive law on licensing, working hours, welfare (canteens, crèches), and machinery safety. ➤ Amendments (1976, 1987) – Strengthened after the Bhopal Gas Tragedy to include inspection and worker complaints. ❖ Compensation Laws: Workmen's Compensation Act (1923) and ESI Act (1948) ensured limited compensation but lacked criminal liability for employers.
New Policy Framework & Erosion of Labour Protections	<ul style="list-style-type: none"> ❖ Post-1990s Liberalization: Push for "labour flexibility" led to dilution of inspection systems and relaxation of safety norms. ❖ Self-Certification Model (2015): Maharashtra allowed industries to self-certify safety compliance - later adopted by several states under Ease of Doing Business.



	<ul style="list-style-type: none"> ❖ OSHC Code, 2020 (Occupational Safety, Health & Working Conditions): <ul style="list-style-type: none"> ➤ Replaces older laws like the Factories Act. ➤ Converts worker safety from a legal right to administrative discretion. ➤ Dilutes state accountability and shifts enforcement from law to executive will. ❖ Extended Working Hours: States like Karnataka (2023) have extended working hours and reduced rest periods - a temporary pandemic measure now made permanent.
Consequences of Weak Labour Protections	<ul style="list-style-type: none"> ❖ Human & Economic Costs: <ul style="list-style-type: none"> ➤ Unsafe conditions threaten lives and weaken industrial productivity. ➤ ILO research: Safe workplaces → higher efficiency, lower absenteeism, stronger trust. ❖ Loss of Accountability: <ul style="list-style-type: none"> ➤ Lack of inspections and enforcement allows negligence to persist. ➤ Trade unions warn that unless workplace safety is reinstated as a right, fatal accidents will continue.
Restoring Balance Between Growth & Labour Justice	<ul style="list-style-type: none"> ❖ Key Reforms Needed: <ul style="list-style-type: none"> ➤ Reinstatement independent safety inspections and strengthen penalties for violations. ➤ Impose criminal liability on negligent employers. ➤ Expand social security to include contract and gig workers. ➤ Align industrial policy with human dignity and sustainability. ❖ Long-Term Vision: <ul style="list-style-type: none"> ➤ Industrial growth must be built on a social contract valuing both productivity and human life. ➤ Labour rights should be treated as fundamental rights, not as hurdles to business.
Conclusion	India's industrial progress cannot come at the cost of workers' safety and dignity. Strengthening labour inspections, restoring accountability, and expanding social security are essential for sustainable growth.

**Topic 7 - Minimum Support Price (MSP)**

Syllabus	Economy Subsidy & Food Security			
Context	The Union Cabinet approved a ₹160 hike in Wheat MSP to ₹2,585 per quintal for the 2025–26 season - a 6.6% increase over last year.			
What Is MSP?	<ul style="list-style-type: none"> ❖ Minimum Support Price (MSP) is the guaranteed price at which the government purchases crops from farmers, regardless of market fluctuations. ❖ Announced by the Cabinet Committee on Economic Affairs (CCEA) based on recommendations of the Commission for Agricultural Costs and Prices (CACP - an advisory body under the Ministry of Agriculture). ❖ Aims to ensure remunerative returns, price stability, and food security. ❖ Legal Status: Not legally binding (except for sugarcane under FRP). ❖ Crops Covered: 23 (22 + FRP for sugarcane) crops (including cereals, pulses, oilseeds, commercial crops). 			
MSP Calculation Methods	Cost Concept	Definition (What is included?)	Swaminathan Commission Recommendation	Government's Current Policy
	A2 Cost	All paid-out expenses incurred by the farmer (cash & kind) on inputs like seeds, fertilizers, pesticides, hired labor, and fuel.	-	-
	A2+FL Cost	A2 Cost + Imputed value of unpaid Family Labour (FL) .	-	MSP should be at least 1.5 times (A2+FL) .
	C2 Cost	A2+FL Cost + Imputed Rent on owned land + Interest Foregone on owned fixed capital assets. (Most Comprehensive Cost)	MSP should be at least C2+50% (to ensure a 50% profit margin over total economic cost).	The government does not use C2 for fixing the MSP, a key demand of farmer groups.
CACP Data (2025–26)	<ul style="list-style-type: none"> ❖ A2+FL = ₹1,239/qtl; MSP = ₹2,585/qtl (109% higher). ❖ Formula (A2+FL + 50%) → ₹1,858/qtl → shows policy premium beyond cost norms. 			
Challenges	<ul style="list-style-type: none"> ❖ Global Price Gap & Trade Impact <ul style="list-style-type: none"> ➢ India's MSP = \$290/tonne, global price = \$225–230/tonne. ➢ Consequences: <ul style="list-style-type: none"> ■ Uncompetitive exports. ■ High import duties (40–80%) to protect domestic markets. 			

	<ul style="list-style-type: none"> ■ Higher procurement burden on FCI → fiscal stress. ■ Isolation from global price trends → weak market efficiency. ❖ Inter-Crop Parity & Policy Bias <ul style="list-style-type: none"> ➤ Wheat gets the highest MSP premium among rabi crops: <ul style="list-style-type: none"> ■ Wheat: 109% Mustard: 93% Masur: 89% Chana/Barley: 58–59%. ➤ Favors rice-wheat monoculture in Punjab, Haryana, UP. ➤ Disincentivizes pulses & oilseeds, worsening import dependence and groundwater depletion.
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Topic 8 - National Geothermal Energy Policy, 2025	
Syllabus	Economy Renewable Energy
Context	India's first National Geothermal Energy Policy was notified in September 2025 by the Ministry of New and Renewable Energy (MNRE) to harness Earth's internal heat for clean energy. It targets 1 GW capacity by 2030 , promotes exploration, and aligns with India's Net Zero 2070 goals.
What is Geothermal Energy?	<ul style="list-style-type: none"> ❖ Definition: Energy harnessed from the Earth's internal (crust) heat, either via hot springs or underground reservoirs. ❖ Uses: Electricity generation, heating, cooling, greenhouse support, and aquaculture. ❖ India's Hotspots: 381 hot springs identified by GSI with temperatures ranging from 35°C to 89°C.
How Geothermal Energy Works	<ul style="list-style-type: none"> ❖ Extraction: Wells drilled into underground hydrothermal reservoirs to access hot water or steam. ❖ Conversion: <ul style="list-style-type: none"> ➤ Dry steam plants: Steam directly spins turbines. ➤ Flash steam plants: High-pressure water converted to steam before turbine rotation. ❖ Electricity Generation: Turbines connected to generators convert mechanical energy into electricity. ❖ Reinjection: Cooled water/steam pumped back into the reservoir to maintain pressure and sustainability.
India's Geothermal Potential	<ul style="list-style-type: none"> ❖ Estimated Capacity: 10,600 MW (Geothermal Atlas of India, 2022). India could reach 4.2 GW by 2035 and ~100 GW by 2045 (IEA Projection). ❖ Key Regions: Himalayan Geothermal Province (Uttarakhand, Himachal - Manikaran, Ladakh - Puga and Chumathang fields, J&K, Arunachal), Cambay Graben (Gujarat), Andaman & Nicobar Islands.



	<ul style="list-style-type: none"> ❖ Repurposing Abandoned Wells: ONGC's oil wells in Cambay and Gandhar are considered for geothermal use.
Policy Initiatives and Projects	<ul style="list-style-type: none"> ❖ Vision: To establish geothermal energy as a major pillar of India's renewable energy mix, enhancing energy security and supporting decarbonization. ❖ Policy Aim: Promote exploration, R&D, and commercialisation of geothermal energy. ❖ International Collaboration: US, Norway, Iceland, and Indonesia for enhanced geothermal systems. ❖ Ongoing Pilots: <ul style="list-style-type: none"> ➤ Gulf of Cambay, Arunachal Pradesh, Uttarakhand. ➤ IIT Madras pilot (450 kWh) in Barmer, Rajasthan, supported by Vedanta's Cairn Oil & Gas. ➤ Reliance Industries is exploring geothermal integration in oil & gas. ❖ MNRE Initiatives: Task force (Aug 2024), five sanctioned projects, viability gap funding (VGF) support under consideration.
Potential Benefits	<ul style="list-style-type: none"> ❖ Baseload Renewable Power: Geothermal is weather-independent and can provide 24x7 power, complementing intermittent solar and wind energy. ❖ Remote Area Development: Crucial for providing clean heating and power access in remote, high-altitude regions like Ladakh and the North-East (where electricity costs are often high - ₹30–32/unit). ❖ Energy Security: Diversifies India's energy mix, reduces dependence on fossil fuels. ❖ Resource Efficiency: Repurposes abandoned oil wells, leveraging existing infrastructure. ❖ Supports Net zero goal (2070), circular economy and industrial decarbonization.
Challenges	<ul style="list-style-type: none"> ❖ High Costs: Approx. ₹36 crore per MW of installed capacity. ❖ Exploration Risks: Geological uncertainties and technical challenges. ❖ Infrastructure Needs: Drilling, reinjection, and technology adaptation require long-term investment. ❖ Regulatory Overlaps: Coordination complexity between MNRE, Ministries of Mines/Petroleum, and state governments on land and resource rights. ❖ Resources are concentrated in specific geothermal provinces.



Govt Schemes

Topic 1 - MGNREGA Amendment 2025

Syllabus	Govt Schemes Rural Development															
Context	The Ministry of Rural Development (MoRD) has amended Schedule I of the MGNREGA Act, 2005 , mandating a minimum proportion of expenditure on water conservation and harvesting works .															
Background: Understanding Schedule-I of MGNREGA	<ul style="list-style-type: none"> ❖ Core Provision: <ul style="list-style-type: none"> ➤ MGNREGA guarantees 100 days of employment per rural household per year, based on demand. ➤ Schedule I lists permissible works and defines the minimum features of the scheme. ❖ Power of Amendment: <ul style="list-style-type: none"> ➤ While the Act itself requires Parliamentary approval, Schedule I can be amended via notification by MoRD. ➤ Since 2005, Schedule I has been amended nearly 24 times. 															
The Latest Amendment (2025)	<ul style="list-style-type: none"> ❖ Key Change: <ul style="list-style-type: none"> ➤ A new provision mandates minimum spending on water-related works at the block level, depending on groundwater status. ➤ Earlier, 60% of district-level works were linked to agriculture, water, and tree-based asset creation. ➤ The focus now shifts from district-level to block-level implementation for greater precision and local relevance. ❖ Mandated Minimum Expenditure (Block-wise): <table border="1" data-bbox="543 1887 1818 2270"> <thead> <tr> <th>Groundwater Category</th> <th>Extraction Level</th> <th>Minimum % of MGNREGA Funds for Water Works</th> </tr> </thead> <tbody> <tr> <td>Over-exploited</td> <td>>100%</td> <td>65%</td> </tr> <tr> <td>Critical</td> <td>90-100%</td> <td>65%</td> </tr> <tr> <td>Semi-critical</td> <td>70-90%</td> <td>40%</td> </tr> <tr> <td>Safe</td> <td>≤70%</td> <td>30%</td> </tr> </tbody> </table> ❖ Source of Categorisation: Based on the Central Ground Water Board (CGWB)'s Dynamic Ground Water Resources Assessment Report, 2024. ❖ CGWB Data (2024): <ul style="list-style-type: none"> ➤ Total Blocks: 6,746 <ul style="list-style-type: none"> ■ Over-exploited: 751 (11.13%) ■ Critical: 206 (3.05%) 	Groundwater Category	Extraction Level	Minimum % of MGNREGA Funds for Water Works	Over-exploited	>100%	65%	Critical	90-100%	65%	Semi-critical	70-90%	40%	Safe	≤70%	30%
Groundwater Category	Extraction Level	Minimum % of MGNREGA Funds for Water Works														
Over-exploited	>100%	65%														
Critical	90-100%	65%														
Semi-critical	70-90%	40%														
Safe	≤70%	30%														

	<ul style="list-style-type: none"> ■ Semi-critical: 711 (10.54%) ■ Safe: 4,951 (73.39%) ■ Saline: 127 blocks.
Likely Financial Implications	<ul style="list-style-type: none"> ❖ Budget Impact: Of the ₹86,000 crore MGNREGS allocation (FY 2025–26), around ₹35,000 crore will go to water-related works. ❖ Key Beneficiary States: States with the most over-exploited/critical blocks will benefit most - Rajasthan (214), Punjab (115), Tamil Nadu (106), Haryana (88), Uttar Pradesh (59).
Significance for Rural India	<ul style="list-style-type: none"> ❖ Climate-Resilient Infrastructure: Promotes sustainable assets such as check dams, ponds, recharge pits, and afforestation. ❖ Policy Convergence: Aligns with Jal Shakti Abhiyan and Atal Bhujal Yojana for water resource management. ❖ Groundwater Sustainability: Encourages community-led recharge projects to combat depletion. ❖ Employment Generation: Expands job opportunities in the water and natural resource management sectors.
Way Forward	<ul style="list-style-type: none"> ❖ Integrated Planning: Ensure convergence with PM Krishi Sinchayi Yojana (PMKSY) and Watershed Development Programmes. ❖ Capacity Building: Train Gram Sabhas and local engineers in scientific water budgeting and management. ❖ Monitoring & Transparency: Use GIS mapping, mobile dashboards, and real-time audits for accountability. ❖ Sustainability Focus: Prioritise recharge structures, soil-water conservation, and tree plantation to maintain water balance.
Conclusion	<p>This amendment represents a strategic policy shift in linking rural employment with water security. By integrating MGNREGA with groundwater sustainability, the government seeks to combat India’s growing water stress while ensuring livelihood resilience and environmental stability.</p>

**Topic 2 - Mission for Aatmanirbharta in Pulses**

Syllabus	Economy Agriculture & Food Security
Context	The Mission for Aatmanirbharta in Pulses (2025-31) is a six-year Central Scheme (Budget - ₹11,440 crore) aimed at making India self-reliant in pulse production, ensuring price stability, and boosting farmer income.
About Mission	<ul style="list-style-type: none"> ❖ Objective: To make India self-reliant in pulses production by reducing import dependency and boosting domestic output. ❖ Primary Focus Crops: Tur (Pigeon Pea), Urad (Black Gram), and Masoor (Red Lentil) (the crops with the highest import dependency). ❖ Key Targets (by 2030-31) <ul style="list-style-type: none"> ➤ Increase production to 350 lakh tonnes (from ≈250 lakh tonnes). ➤ Expand area to 310 lakh hectares (by bringing an additional 35 lakh hectares under cultivation). ➤ Raise productivity (yield) to 1,130 kg/ha. ❖ Coverage: 416 target districts via a cluster-based approach. ❖ Convergence: Linked with National Food Security Mission (NFSM), Rashtriya Krishi Vikash Yojana (RKVY), Pradhan Mantri Fasal Bima Yojana (PMFBY), and other schemes. ❖ Procurement: 4-year assured MSP/Price Support via NAFED & NCCF.
Agricultural & Technological Dimension	<ul style="list-style-type: none"> ❖ Productivity Boost & Seed Quality <ul style="list-style-type: none"> ➤ Distribute 6 million quintals of certified seeds and 8.8 million seed kits. ➤ Develop climate-resilient, high-yielding varieties via ICAR & IIPR Kanpur. ➤ Use the SATHI portal for seed traceability and quality control. ❖ Area Expansion & Crop Diversification <ul style="list-style-type: none"> ➤ Add 35 lakh ha using rice-fallow lands and intercropping with oilseeds/sugarcane. ➤ Promotes soil fertility via nitrogen fixation. ❖ Climate & Soil Health <ul style="list-style-type: none"> ➤ Encourage micro-irrigation, drought-tolerant crops, and integrated pest management. ➤ Link with Soil Health Cards for balanced nutrient management.
Economic & Market Dimensions	<ul style="list-style-type: none"> ❖ Assured Procurement & Price Stability <ul style="list-style-type: none"> ➤ 100% MSP procurement to shift farmers from paddy/wheat. ➤ Strengthen price monitoring and buffer stock mechanisms. ❖ Post-Harvest Management <ul style="list-style-type: none"> ➤ Establish 1,000 pulse processing units with a subsidy of up to ₹25 lakh each. ➤ Focus on grading, packaging, and value addition via FPOs & cooperatives.

Farmer-Centric & Social Aspects	<ul style="list-style-type: none"> ❖ Encourage a shift to water-efficient pulse crops for sustainability. ❖ Special focus on small, marginal, and women farmers (SHGs). ❖ Use KVKs, ICAR & FPOs for training, demonstrations, and extension support.
Key Challenges	<ul style="list-style-type: none"> ❖ Coordination issues across Centre-State agencies. ❖ Inadequate storage & procurement infrastructure. ❖ Risks from climate volatility and cheap imports. ❖ Farmer trust in the procurement system and payment delays.
Environmental & Strategic Importance	<ul style="list-style-type: none"> ❖ Nutritional Security: Pulses tackle protein deficiency. ❖ Sustainability: Enhance soil health, reduce fertilizer use. ❖ Water Conservation: Low water requirement. ❖ Forex Savings: Reduced pulse imports. ❖ Climate Adaptation: Promotes resilient crops.
Way Forward	<ul style="list-style-type: none"> ❖ Strengthen seed supply chains and digital procurement systems. ❖ Promote FPO-based value chains and branding. ❖ Expand research, insurance, and climate-smart agriculture. ❖ Ensure timely payments and inclusion of smallholders.
Conclusion	The Mission for Aatmanirbharta in Pulses is a transformative initiative towards self-reliant, climate-smart, and nutritionally secure agriculture .

Topic 3 - PRIP Scheme	
Syllabus	Government Schemes
Context	The Promotion of Research & Innovation in Pharma-MedTech Sector (PRIP) scheme aims to make India a global hub for Pharma-MedTech R&D by fostering industry-academia collaboration, innovation, and quality research.
About the PRIP Scheme	<ul style="list-style-type: none"> ❖ Launched by: Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers. ❖ Notification Date: 17 August 2023. ❖ Total Outlay: ₹5,000 crore over 7 years (2023-30). ❖ Objective: Promote research, innovation, and scientific talent in the Pharma-MedTech sector.
Components of PRIP	<ul style="list-style-type: none"> ❖ Component A – Centres of Excellence (CoE) <ul style="list-style-type: none"> ➤ Strengthen research infrastructure in existing 7 National Institutes of Pharmaceutical Education and Research (NIPERs). ➤ Focus on pre-identified research areas. ➤ Financial outlay: ₹700 Crores.

	<ul style="list-style-type: none"> ❖ Component B – Industry & Academic Research <ul style="list-style-type: none"> ➤ Promote R&D in 6 priority areas. ➤ Support industries, MSMEs, SMEs, startups, and in-house/academic research. ➤ Financial outlay: ₹4250 Crores. ➤ Funding: <ul style="list-style-type: none"> ■ Big companies: up to ₹125 Crore. ■ Startups: up to ₹1 Crore (5-year period, milestone-based).
Priority Areas	<ul style="list-style-type: none"> ❖ New Chemical Entity, New Biological Entity, Phyto-pharmaceuticals ❖ Complex generics & Biosimilars ❖ Precision medicine & targeted therapeutics ❖ Medical devices ❖ Orphan Drugs ❖ Anti-microbial resistance (AMR) drug development.
Implementation & Governance	<ul style="list-style-type: none"> ❖ Guided by an Empowered Committee chaired by the CEO, NITI Aayog. ❖ Members include secretaries from Pharmaceuticals, Health, ICMR, DBT, CSIR, AYUSH, and DST.

Topic 4 - Bima Sugam	
Syllabus	Economy Financial Inclusion, Digital Public Infrastructure
Context	Bima Sugam, conceptualized by the Insurance Regulatory and Development Authority of India (IRDAI) , is envisioned as the world's largest digital insurance marketplace.
Bima Trinity: India's Three-Pronged Insurance Strategy	<ul style="list-style-type: none"> ❖ Objective: Increase insurance penetration by improving availability, affordability, and accessibility. ❖ Components: <ul style="list-style-type: none"> ➤ Bima Sugam: Unified digital portal connecting insurers, distributors, and policyholders. ➤ Bima Vistaar: Comprehensive, affordable, all-in-one insurance product (composite rural insurance). ➤ Bima Vahak: Women-led field distribution network expanding reach to underserved areas.
Bima Sugam: Unified Digital Insurance Marketplace	<ul style="list-style-type: none"> ❖ Operated by Bima Sugam India Federation (BSIF) – a consortium of insurers. ❖ Inspired by UPI (Unified Payments Interface) and ONDC (Open Network for Digital Commerce). ❖ Scope: Covers all types of insurance – life, health, motor, travel, property, and agriculture.



	<ul style="list-style-type: none"> ❖ Functions: Policyholders can buy, renew, manage, claim, and securely store insurance documents. ❖ Platform Model: <ul style="list-style-type: none"> ➤ Minimal transaction fees; insurers participate directly, many holding equity in BSIF. ➤ Offers end-to-end services, including claim settlement, unlike private aggregators (e.g., PolicyBazaar). ❖ Comparison Advantage: Transparent, low-cost alternative integrating all stakeholders on one portal.
Key Features and Benefits	<ul style="list-style-type: none"> ❖ Centralised Operations: Insurers, agents, brokers, banks, and aggregators operate on one platform. ❖ Customer Empowerment: Easy policy comparison, choice of suitable plans, and simplified access. ❖ Support for Insurers & Intermediaries: <ul style="list-style-type: none"> ➤ Real-time validated data access. ➤ Reduced paperwork and efficient service delivery. ❖ Digital Public Infrastructure (DPI): <ul style="list-style-type: none"> ➤ Bima Sugam is India's first visible DPI for insurance. ➤ Linked with India Stack APIs for seamless nationwide digital service delivery. ❖ Future-Ready Ecosystem: <ul style="list-style-type: none"> ➤ Flexible to accommodate new insurance products and regulatory innovations. ➤ Supports sandbox products, promoting innovation.
Significance	<ul style="list-style-type: none"> ❖ For Policyholders: Simplifies choice, enhances transparency, ensures fair access, and empowers users. ❖ For Insurers: Streamlines distribution, reduces compliance costs, and encourages innovation. ❖ For the Economy: Strengthens financial inclusion, aligns with Insurance for All by 2047 under Viksit Bharat 2047. ❖ Global Benchmark: Sets a model for digital public infrastructure in insurance, similar to UPI for payments.
Conclusion	By unifying all stakeholders, improving access, and promoting transparency, it enhances financial inclusion, empowers policyholders, and sets the foundation for a tech-driven, globally benchmarked digital public insurance infrastructure.

**Topic 5 - Swasth Nari, Sashakt Parivar Abhiyaan**

Syllabus	Government Schemes
Context	Launched by the Prime Minister, this is India's largest women and child health mobilisation campaign , integrated with 8th Poshan Maah 2025 , aiming for preventive, promotive, and curative care nationwide.
Key Features	<ul style="list-style-type: none">❖ Jointly led by Ministry of Health & Family Welfare (MoHFW) and Ministry of Women & Child Development (MoWCD).❖ Objective:<ul style="list-style-type: none">➤ Early detection & treatment of NCDs, cancer, TB, anemia, sickle cell disease.➤ Promote nutrition, menstrual hygiene, healthy lifestyles, and mental well-being.❖ Nationwide Health Camps:<ul style="list-style-type: none">➤ Over 1 lakh camps from 17 Sep – 2 Oct 2025 at CHCs, district hospitals, and Ayushman Arogya Mandirs.❖ Specialist Services:<ul style="list-style-type: none">➤ Gynaecology, paediatrics, ophthalmology, ENT, dental, dermatology, and psychiatry.❖ Screening & Diagnostics:<ul style="list-style-type: none">➤ BP, sugar, BMI, breast & cervical cancer, oral cavity checks.❖ Nutrition & Anaemia Management:<ul style="list-style-type: none">➤ Hb testing, IFA supplements, deworming, Annaprashan ceremonies, recipe demos.➤ Awareness campaigns via the FSSAI Eat Right initiative.❖ Maternal & Child Health- ANC check-ups, growth monitoring, immunisation, and MCP card distribution.



History

Topic 1 - UNESCO's Virtual Museum

Syllabus	Culture & Heritage
Context	UNESCO has launched the Virtual Museum of Stolen Cultural Objects - a digital initiative to reconnect communities with cultural treasures lost to theft, smuggling, and colonialism.
About MONDIACULT	<ul style="list-style-type: none"> ❖ Meaning: UNESCO World Conference on Cultural Policies and Sustainable Development. ❖ Objective: To define a global agenda for culture as part of sustainable development. ❖ Key Conferences: <ul style="list-style-type: none"> ➤ 1982 (Mexico City): Broadened the concept of culture beyond arts to social identity. ➤ 2022 (Mexico City): Declared culture a global public good and human right (Mexico Declaration). ➤ 2025 (Barcelona): Focused on digital transformation, AI, and the role in peacebuilding.
UNESCO's Virtual Museum: A Digital Home for Stolen Heritage	<ul style="list-style-type: none"> ❖ Objective: To digitally showcase and track stolen or lost cultural artifacts from across the world. ❖ Scope: ~240 artifacts from 46 countries displayed. ❖ Unique Vision: Designed to "empty itself" as real artifacts are recovered and repatriated. ❖ Technology Used: <ul style="list-style-type: none"> ➤ AI-generated 3D reconstructions allow users to view and rotate artifacts virtually. ➤ Accessible through mobile devices and conference installations. ❖ Partnerships: Backed by Saudi Arabia and INTERPOL for anti-trafficking collaboration.
Symbolic Design by Francis Kéré	<ul style="list-style-type: none"> ❖ Concept: The website's layout is modeled after a baobab tree - a symbol of endurance and wisdom in Africa. ❖ Visitors can browse by artifact name, material, colour, or region, with testimonies and theft maps.

A Platform for Restitution and Global Dialogue	<ul style="list-style-type: none"> ❖ Promotes international cooperation among museums, governments, and civil society. ❖ Hosts exhibitions on successful restitutions and cultural loss awareness. ❖ Aims to strengthen the fight against the illicit trafficking of cultural objects.
India's Lost Deities in UNESCO's Virtual Museum	<ul style="list-style-type: none"> ❖ Includes two 9th-century sandstone idols from Mahadev Temple, Pali (Chhattisgarh): <ul style="list-style-type: none"> ➤ Shiva as Nataraja – Cosmic dance symbolizing the victory of knowledge over ignorance. ➤ Brahma – Creator, seated in lalitasana with rosary, Vedas, and goose of wisdom.

Topic 2 - Sarcophagus Discovery	
Syllabus	Ancient History Art & Culture
Context	The first AMS radiocarbon dating of a sarcophagus from Kilnamandi (TN) dates it to 1692 BCE , revealing Late Harappan-era trade links between South India and regions like Gujarat and Maharashtra, reshaping our understanding of ancient Tamilakam.
What Is It?	<ul style="list-style-type: none"> ❖ Definition: A Terracotta coffin used for burials, containing charcoal, pottery, and grave goods. ❖ Purpose: Provides insights into burial practices, social hierarchy, and cultural life of ancient Tamilakam.
Key Features	<ul style="list-style-type: none"> ❖ Date: 1692 BCE (Late Harappan period). ❖ Grave Goods: <ul style="list-style-type: none"> ➤ Etched carnelian beads (from Gujarat/Maharashtra). ➤ Iron tools and spears (7–8 feet). ➤ High-tin bronze objects. ➤ Pottery and charcoal. ❖ Graffiti Marks: <ul style="list-style-type: none"> ➤ Fork-like symbols, semi-concentric 'U' shapes, vertical lines with wavering lines. ➤ ~90% similarity with Indus Valley symbols. ➤ Limited to certain burials → indicates clan identity. ❖ Associated Burials: Collective urn burials in slab enclosures.

**Topic 3 - Sarnath**

Syllabus	History Art & Culture
Context	India has nominated it for the UNESCO World Heritage List (2025–26 cycle).
Key Facts	<ul style="list-style-type: none"> ❖ Location: Varanasi, Uttar Pradesh. ❖ Significance: First sermon of Buddha (Dhammachakkappavattana Sutta) to his five former companions (Panchavaggiya). Marks the founding of the Buddhist Sangha (monastic order). ❖ Other Holy Sites: Lumbini, Bodh Gaya, Kushinagara. ❖ Historical Attribution Revised: ASI to install plaque crediting Babu Jagat Singh (1787–88) for rediscovery, correcting earlier British attribution.
Origin & Early History	<ul style="list-style-type: none"> ❖ Ancient Names: Isipatana (Pali) or Mrigadava (Deer Park). ❖ Ashokan Era (268–232 BCE): <ul style="list-style-type: none"> ➤ Ashoka built stupas, monasteries, and erected the Lion Capital Pillar. ➤ Dhamek Stupa marks Buddha's first sermon site.
Patronage & Flourishing	<ul style="list-style-type: none"> ❖ Kushana & Gupta Dynasties (1st–6th CE): Expansion and refurbishment of monasteries; thriving monastic hub. ❖ Gupta Period - Center for the Sammatiya school of Buddhism. ❖ Flourished until the 12th century CE.
Decline & Destruction (12th Century)	<ul style="list-style-type: none"> ❖ Possible Reasons: Qutb-ud-din Aibek's invasion (1193 CE) or brahmanical takeover & later Islamic raids. ❖ Impact: Monks fled; the site remained in ruins for ~700 years.
Key Features Today	<ul style="list-style-type: none"> ❖ Dhamek Stupa: Built by Ashoka (~500 CE), marks the sermon site. ❖ Ashokan Pillar & Lion Capital: Now India's national emblem. ❖ Archaeological Museum: Houses relics, inscriptions, sculptures (e.g., seated Buddha in Dharmachakra Mudra). ❖ Mulagandha Kuti Vihara (1930s): Modern temple with frescoes by Japanese artist Kosetsu Nosu. ❖ Chaukhandi Stupa: Commemorates Buddha's meeting with disciples.

**Topic 4 - Bathukamma Festival**

Syllabus	History Art & Culture
Context	Telangana's iconic Bathukamma Festival , a grand floral celebration of feminine divinity, recently entered the Guinness World Records for its large-scale cultural display organized by the state government.
About Bathukamma Festival	<ul style="list-style-type: none"> ❖ A floral festival celebrated by the women of Telangana. ❖ Symbolizes female energy, prosperity, and nature's abundance. ❖ The word Bathukamma means "Mother Goddess, Come Alive", representing divine feminine power and protection.
Historical and Cultural Significance	<ul style="list-style-type: none"> ❖ Linked to legends of Goddess Gauri's revival and King Dharmangada-Queen Satyavati of the Chola dynasty. ❖ The Kakatiya dynasty promoted Bathukamma as a festival of agriculture, fertility, and womanhood. ❖ Declared the official state festival of Telangana after its formation in 2014.

Topic 5 - Thumri Music

Syllabus	History Art & Culture
Context	The demise of Pandit Chhannulal Mishra (1936-2025) , a Padma Vibhushan and doyen of the Purab Ang Thumri from the Banaras Gharana, marks the end of an era in Indian semi-classical music.
About Thumri Music	<ul style="list-style-type: none"> ❖ Definition: A semi-classical vocal form of Hindustani music, often called the "lyric of Indian classical music." → Acts as a bridge between high classical music (like Dhrupad or Khayal) and folk music. ❖ Origin: Emerged in 18th-century Eastern Uttar Pradesh (Lucknow & Banaras), developed by Sadiq Ali Shah under patronage of Nawab Wajid Ali Shah. ❖ Language: Sung in Braj Bhasha, Awadhi, and Hindi, with traces of Urdu and Sanskrit. ❖ Themes: Revolves around love, devotion, and separation, often based on Radha-Krishna episodes (Shringara Rasa). ❖ Forms: Bol-Banav Thumri, Bandish ki Thumri, Hori, Kajri, Dadra.
Key Features	<ul style="list-style-type: none"> ❖ Focus on bhava (emotion) rather than strict raga grammar. ❖ Allows freedom in improvisation and lyrical expression. ❖ Deeply linked with Kathak dance, enhancing storytelling. ❖ Influenced by folk forms like Hori, Dadra, Chaiti, Kajri, Jhoola, etc.

**Topic 6 - Acharya Vinoba Bhave**

Syllabus	Modern History of India Personalities
Context	The Prime Minister of India paid homage to Acharya Vinoba Bhave on his birth anniversary (11 September 2025).
Who was he?	<ul style="list-style-type: none"> ❖ Spiritual successor of Mahatma Gandhi. ❖ Eminent philosopher, reformer, linguist, and advocate of Sarvodaya (welfare of all). ❖ Leader of the Bhoodan (Land-Gift) Movement promoting voluntary land redistribution.
Birth & Early Life	<ul style="list-style-type: none"> ❖ Born on 11 September 1895, at Gagode village, Maharashtra. ❖ Spiritual from childhood, drawn to the Bhagavad Gita and ascetic practices. ❖ Inspired by Gandhi's speech at BHU, abandoned formal education in 1916. ❖ Joined Kochrab Ashram and later Sabarmati Ashram to actively participate in Gandhian activities.
Contribution to the Freedom Movement	<ul style="list-style-type: none"> ❖ First Individual Satyagrahi (1940) at Gandhi's request, symbolizing personal commitment to truth-force. ❖ Participated in the Quit India Movement (1942) and Gandhian constructive programmes: <ul style="list-style-type: none"> ➤ Khadi promotion ➤ Nai Talim (Basic Education) ➤ Village industries ❖ Resided in Vinoba Kutir, Sabarmati Ashram; delivered Gita talks widely translated and published.
Social & Spiritual Contributions	<ul style="list-style-type: none"> ❖ Bhoodan Movement (1951): Collected 4+ million acres from landlords for landless farmers. ❖ Gramdan (1954): Encouraged the donation of entire villages for community ownership. ❖ Promoted non-violence, self-reliance, sanitation, and rural upliftment. ❖ Prolific writer and polyglot: <ul style="list-style-type: none"> ➤ Translated the Bhagavad Gita into Marathi (Geetai). ➤ Commented on the Bible, the Quran, and Dnyaneshwari.



Science and Technology

Topic 1 - Certified Randomness Technique

Syllabus	Science & Technology Quantum Technology
Context	Researchers at Raman Research Institute (RRI), Bengaluru , have demonstrated a quantum-certified randomness generation technique using a single qubit on IBM's quantum cloud.
About the Technique	<ul style="list-style-type: none"> ❖ Nature: Quantum-based method that generates truly unpredictable random numbers using the inherent uncertainty of quantum mechanics. ❖ Developed by: RRI Bengaluru, in collaboration with IBM Quantum. ❖ Purpose: To produce certified random outputs for secure encryption and communication systems.
How It Works	<ul style="list-style-type: none"> ❖ Uses one qubit in a simple quantum circuit with single-qubit gate rotations. ❖ Randomness tested through Leggett-Garg Inequality (LGI) - a temporal analogue of the Bell test. ❖ Violation of LGI confirms randomness arises from quantum effects, not classical noise. ❖ Error-mitigation and readout correction ensure reliability and accuracy.
Key Features	<ul style="list-style-type: none"> ❖ Single-Qubit Simplicity: Uses one qubit - compatible with existing quantum hardware. ❖ Device-Independent Certification: Ensures quantum-origin randomness, free from device bias. ❖ Error-Resilient Design: Incorporates mitigation techniques for precise output. ❖ Scalable Use: Can be expanded for real-time encryption or quantum benchmarking.
Significance	<ul style="list-style-type: none"> ❖ Quantum Advantage Realized: Achieves certified randomness on current NISQ devices. ❖ Cybersecurity Boost: Enables tamper-proof random numbers for secure encryption. ❖ Scientific Validation: Confirms Leggett-Garg inequality violations, strengthening quantum theory foundations.
Applications	<ul style="list-style-type: none"> ❖ Cryptography: Secures digital communication, banking, and military systems. ❖ Digital Governance: Prevents manipulation in e-voting, lotteries, and secure authentication.

**Topic 2 - Google's AI Data Centre**

Syllabus	Science & Technology ICT
Context	Google's \$15 billion investment in an AI data centre at Visakhapatnam marks its largest commitment in India, signaling a new phase in AI-driven digital infrastructure, clean energy, and global connectivity.
Project Overview	<ul style="list-style-type: none"> ❖ Investment: \$15 billion over 5 years – Google's biggest in India. ❖ Location: Visakhapatnam, Andhra Pradesh. ❖ Partners: AdaniConneX (infrastructure & green energy) and Airtel (connectivity). ❖ Objective: Build an advanced AI data hub and subsea gateway linking India to Google's global network across 12 nations. <p>Subsea Gateway</p> <ul style="list-style-type: none"> ❖ New International Gateway: Built on India's east coast in Visakhapatnam. ❖ Connectivity: Multiple subsea cables linking India to Google's 2M+ mile global network.
AI Data Centres vs Traditional Centres	<ul style="list-style-type: none"> ❖ Traditional Centres: CPU-based, used for hosting websites & storage. ❖ AI Data Centres: GPU-powered, designed for heavy computation (image, video, generative AI). ❖ Energy Use: Far higher, needing advanced cooling and stronger power systems. ❖ Global Impact: Expected to add \$15B to US GDP (2026–2030) through AI-cloud integration.
Strategic Significance	<ul style="list-style-type: none"> ❖ Trilateral Synergy: Combines Google's tech expertise, Adani's green infrastructure, and Airtel's telecom reach. ❖ Outcome: Positions India as a global AI infrastructure hub and clean-energy data leader. ❖ Policy Implication: Advances India's digital sovereignty and AI ecosystem.
India's Data Centre Boom	<ul style="list-style-type: none"> ❖ Current Market Size: \$10 billion; generated \$1.2 billion in FY24. ❖ Future Capacity: To reach 1.8 GW by 2027 (+795 MW). ❖ Growth Drivers: AI, cloud computing, and digital transformation.
Policy Concerns & Job Creation	<ul style="list-style-type: none"> ❖ Debate: Incentivising data centres despite high energy use and limited job scope. ❖ Impact: Google's project is expected to generate 1.88 lakh direct & indirect jobs. ❖ Regional Gains: Boost to Andhra Pradesh's economy and tech sector.

Energy Challenge & Cost Factors	<ul style="list-style-type: none"> ❖ IEA Projection: Global data centre power use could double by 2026. ❖ Cost Breakdown: <ul style="list-style-type: none"> ➤ 40% capex – electrical systems. ➤ 65% opex – electricity consumption. ❖ Setup Cost: ₹60–70 crore per MW capacity in India.
Renewable vs Nuclear Debate	<ul style="list-style-type: none"> ❖ Renewable Limitations: Intermittent supply and weak storage. ❖ Emerging Solution: Nuclear energy as a clean, 24×7 power source for AI data centres. ❖ Policy Trend: India is exploring nuclear-backed models like the US for energy-intensive AI growth.

Topic 3 - India's Biotech Surge	
Syllabus	Science & Technology Bio Technology
Context	India's biotech ecosystem is witnessing a massive transformation - expanding from 500 startups in 2018 to over 10,000 in 2025. Backed by policies like BioE3 (2025) and the target of a \$300 billion bioeconomy by 2030 .
Growth of India's Biotech Ecosystem	<ul style="list-style-type: none"> ❖ Startup Boom: 20-fold rise (2018–2025) with 94 incubators in 25 States, marking a shift from generics to deep-tech innovation. ❖ Global Standing: India is ranked among the top 12 biotechnology destinations globally and is the 3rd largest in the Asia-Pacific region. ❖ R&D Advantage: Low-cost research base and strong STEM talent driving innovation. ❖ Vaccine Leadership: India supplies 60% of global immunization doses (DPT, BCG, measles). ❖ Bioeconomy Vision: BioE3 Policy targets \$300 bn bioeconomy by 2030, aligning biotech with IT & energy growth.
Key Government Initiatives	<ul style="list-style-type: none"> ❖ Biotechnology Industry Research Assistance Council (BIRAC): A public sector enterprise under DBT. Supports 6,000+ startups through programs like Biotechnology Ignition Grant (BIG), Small Business Innovation Research Initiative (SBIRI - seed funding & incubation), Promoting Academic Research Conversion to Enterprise (PACE - incubation, IP support). ❖ BioE3 Policy (Biotechnology for Economy, Environment, and Employment): Integrates biomanufacturing, bioenergy, bioagriculture, and biopharma under one national framework. ❖ PLI Scheme for Biopharma: Boosts domestic production of critical inputs to reduce import dependence.

	<ul style="list-style-type: none"> ❖ National Biotechnology Development Strategy (NBDS) 2020-2025: Provides the strategic framework to strengthen research, skill development, and industry alignment. ❖ FDI & Startup India: 100% FDI in biotech attracting global partnerships and investors.
Major Scaling Challenges	<ul style="list-style-type: none"> ❖ Funding Gaps: Limited Series B/C funding - India raised only \$3 bn (2023-25) vs China's \$12 bn. ❖ Infrastructure Fragmentation: 70+ incubators exist, but few provide GMP or pilot-scale facilities end-to-end. ❖ Regulatory Lag: Complex, slow, and outdated regulatory frameworks for clinical trials, gene therapies (e.g., CRISPR), and GM crops delay market entry. ❖ Talent Drain: Over 40% biotech PhDs migrate abroad due to limited career incentives. ❖ Market Access Issues: Only 15% of biosimilars meet EU EMA norms due to data integrity issues.
Strategic Reforms Needed	<ul style="list-style-type: none"> ❖ Ecosystem Consolidation: Create biotech clusters or "GMP Commons" (Genome Valley, Mumbai-Pune corridor). ❖ Financing Innovation: Establish a National Bio-Venture Fund with blended capital (venture + debt + insurance). ❖ Clinical Trial Hubs: Build late-phase trial centres in AIIMS with EHR-linked labs. ❖ Talent Retention: Launch reverse brain drain schemes — tax breaks, relocation grants, AI-biostatistics training. ❖ Regulatory Modernisation: Adopt risk-based adaptive frameworks like the EU AI Act and the US FDA models. ❖ Public-Private Collaboration: Expand co-development between government labs, academia, and startups.

Topic 4 - Isobutanol	
Syllabus	Science & Technology Biotechnology Biofuel
Context	Isobutanol is a four-carbon alcohol being piloted as a diesel blend by Automotive Research Association of India (ARAI) , offering higher energy density than ethanol and potential emission benefits. It aims to support net-zero 2070 goals and sugar sector viability.
About Isobutanol	<ul style="list-style-type: none"> ❖ A four-carbon alcohol (C₄H₁₀O) derived from biomass fermentation (e.g., sugarcane, maize). ❖ Nature: Clear, flammable liquid higher energy density than ethanol.

	<ul style="list-style-type: none"> ❖ Primary Use: Solvent (paints, coatings) and emerging biofuel blendstock for diesel.
Production	<ul style="list-style-type: none"> ❖ Method: Fermentation of sugars (cane juice, molasses, grains) using genetically engineered microbes. ❖ Infrastructure Needs: Minor retrofitting in sugar refineries for fermentation and distillation to separate ethanol and isobutanol. ❖ Co-Production: Can be produced alongside ethanol.
Key Features	<ul style="list-style-type: none"> ❖ Flash Point: Higher than ethanol → safer for diesel blending. ❖ Miscibility: Blends uniformly with diesel without extra additives. ❖ Energy Density: Higher calorific value → better fuel efficiency. ❖ Emission Benefits: Reduces particulate emissions and carbon intensity.
Applications	<ul style="list-style-type: none"> ❖ Diesel Blending: Recommended up to 10% for the transport sector. ❖ Industrial Solvent: Paints, coatings, chemical synthesis. ❖ Future Fuels: Aviation, marine fuels, jet fuel, plastics, rubber intermediates.
Limitations	<ul style="list-style-type: none"> ❖ Low Cetane Number: May reduce ignition quality → needs additives. ❖ Engine Compatibility: Blends >10% may affect performance and durability. ❖ Cost: Blending infrastructure and additives increases cost. ❖ Miscibility: May require biodiesel as a cosolvent for full homogeneity.

Topic 5 - India's First Bamboo-Based Ethanol Plant

Syllabus	Science & Technology Biotechnology Biofuel
Context	PM inaugurated India's first bamboo-based ethanol plant at Numaligarh Refinery, Assam , under the National Bio-Energy Mission , promoting renewable fuels and regional development.
Key Features	<ul style="list-style-type: none"> ❖ Type: 2G ethanol plant converting bamboo biomass into bioethanol. ❖ Developer: Assam Bio-Ethanol Pvt Ltd (ABEL) in collaboration with Numaligarh Refinery Ltd (NRL), under the Ministry of Petroleum & Natural Gas. ❖ Capacity: 60,000 KL of ethanol annually for petrol blending. ❖ Technology: Enzymatic hydrolysis + fermentation (advanced 2G bio-refinery). ❖ Feedstock: Bamboo from Assam & NE states. ❖ Sustainability: Reduces GHG emissions; prevents stubble/bamboo burning. ❖ Employment: Creates jobs in cultivation, collection, transport, and processing.
Aim & Significance	<ul style="list-style-type: none"> ❖ Energy Security: Reduces crude imports, saving ₹1,000+ crore annually. ❖ Farmer Empowerment: Provides an assured market for bamboo farmers.

	❖ Green Economy: Supports India's Net Zero 2070 goals and ethanol blending roadmap.
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Topic 6 - Light-based Computers (Optical Computers)

Syllabus	Science & Technology Frontier Technologies
Context	Researchers from Tampere University (Finland) and Université Marie et Louis Pasteur (France) demonstrated that optical computers using light pulses can perform AI tasks faster and more energy-efficiently than conventional electronic computers.
What Is It?	<ul style="list-style-type: none"> ❖ Optical computers process information using photons (light particles) instead of electrons. ❖ Offer ultra-fast, high-bandwidth, and energy-efficient computing, ideal for AI and large-scale data tasks. ❖ Recent experiments achieved AI image recognition using light through glass fibres.
How It Works	<ul style="list-style-type: none"> ❖ Data Conversion: Input data (e.g., an image) is converted into a light pulse. ❖ Transmission: Pulse travels through an optical fibre, where light exhibits non-linear responses. ❖ Transformation: Changes in light's colour spectrum/fingerprint encode processed data. ❖ Decoding: Transformed light is decoded to produce the result, such as identifying an object in an image.
Key Characteristics	<ul style="list-style-type: none"> ❖ Speed: Light travels faster than electricity → near-instant calculations. ❖ Efficiency: Minimal heat generation → saves energy compared to silicon chips. ❖ Parallel Processing: Different light colours = multiple simultaneous data streams. ❖ Accuracy: Experiments showed 91–93% success in image recognition. ❖ Scalability: Optimised fibre length and light intensity improve performance.
Applications	<ul style="list-style-type: none"> ❖ AI & Machine Learning: Faster neural network training, real-time image recognition. ❖ Supercomputing: Energy-efficient data centres for climate modelling, genomics, and weather forecasting. ❖ Telecom & Internet: Enhanced fibre-optic data processing, reduced latency. ❖ Defence & Space: High-speed analysis for satellite imaging, surveillance, and reconnaissance.

Topic 7 - Frontier 50 Initiative

Syllabus	Science & Technology Frontier Technologies
Context	NITI Aayog launched the Frontier 50 Initiative to deploy frontier technologies in 50 Aspirational Districts/Blocks, aiming to accelerate development and bridge digital divides by Viksit Bharat 2047 .
Key Features	<ul style="list-style-type: none"> ❖ What is it? <ul style="list-style-type: none"> ➤ A flagship programme to apply AI, IoT, drones, and blockchain in underserved regions. ➤ Part of NITI Aayog's Frontier Tech Hub. ❖ Objectives: <ul style="list-style-type: none"> ➤ Fast-track use cases from Frontier Tech Repository. ➤ Achieve saturation of health, education, skilling, and welfare services. ➤ Reduce digital and development gap in Aspirational regions. ❖ Implementation: <ul style="list-style-type: none"> ➤ 50 Pilot Districts/Blocks selected from ADP/ABP. ➤ Districts choose priority tech use cases in agriculture, health, education, and livelihoods. ❖ Support & Partnerships: <ul style="list-style-type: none"> ➤ Capacity building of the local administration for scaling. ➤ PPP model with startups, industry & academia for co-creation. ❖ Monitoring- KPIs are defined to track service delivery, citizen impact, and replicability.

Topic 8 - AgriEnIcs Programme

Syllabus	Science & Technology Govt Schemes
Context	The Ministry of Electronics and Information Technology (MeitY) has recently announced the transfer of technology under the AgriEnIcs Programme .
About AgriEnIcs Programme	<ul style="list-style-type: none"> ❖ AgriEnIcs = Agriculture + Electronics + ICT + Sensors. ❖ Launched by: Ministry of Electronics and Information Technology (MeitY) in October 2025. ❖ Objective: <ul style="list-style-type: none"> ➤ Promote R&D, deployment, and commercialization of advanced technologies in the agriculture and environment sectors. ➤ Focuses on lab-to-field translation of innovations. ➤ Serve as a national platform for technology translation and field-level demonstration.

	<ul style="list-style-type: none"> ❖ Technology Integration: <ul style="list-style-type: none"> ➤ Uses AI, IoT, machine vision, and sensor networks to enable digital precision farming and real-time environmental monitoring. ➤ Enhances productivity, resource efficiency, and sustainability in agriculture. ❖ Collaborative Framework: Unites research institutions, industries, and government agencies to co-develop scalable tech-based agricultural solutions.
Nodal Agency - C-DAC Kolkata	<ul style="list-style-type: none"> ❖ Implementing Agency: Centre for Development of Advanced Computing (C-DAC), Kolkata. ❖ Role: Lead coordination of R&D, technology transfer, and collaboration with academic and industrial partners.

Key Technologies Launched (2025)

Product Name	Purpose
CT-VIEU	Smart camera for crop texture and pest detection
GRAIN-EX	Grain quality analyzer using AI and spectroscopy
ODOR PRAVAH	Odour mapping system for solid waste and composting sites
e-SHODH	Electronic soil health diagnostics platform

Topic 9 - Lecanemab Drug

Syllabus	Science Health
Context	Australia has recently approved Lecanemab , a breakthrough monoclonal antibody drug that targets the root cause of early-stage Alzheimer's disease , marking a major step in neurodegenerative research.
About Lecanemab	<ul style="list-style-type: none"> ❖ Type: Monoclonal antibody drug for early-stage Alzheimer's. ❖ Purpose: Slows disease progression by removing amyloid protein build-up in the brain. ❖ Approach: Targets the underlying cause, not just symptoms — a shift from conventional Alzheimer's therapies.
Concerns and Challenges	<ul style="list-style-type: none"> ❖ High cost limits accessibility. ❖ Side effects: Brain swelling and inflammation in some patients. ❖ Raises safety and affordability issues for large-scale use.

**Topic 10 - Neurons**

Syllabus	Science Health
Context	A recent (2025) study has discovered Dendritic Nanotubes (DNTs) in mice and human brains - revealing a new pathway for neuron-to-neuron communication beyond traditional synapses.
About Neurons	<ul style="list-style-type: none"> ❖ Definition: Neurons are the basic structural and functional units of the brain and nervous system. ❖ Functions: <ul style="list-style-type: none"> ➤ Receive sensory input. ➤ Send motor commands to muscles. ➤ Process and transmit electrical & chemical signals.
Structure of a Neuron	<ul style="list-style-type: none"> ❖ Dendrites: Receive signals from other neurons. ❖ Cell Body (Soma): Contains nucleus; integrates information. ❖ Axon: Transmits impulses away from the soma. ❖ Synapse: Junction where neurotransmitters pass signals to next neuron.
Neuronal Communication	<ul style="list-style-type: none"> ❖ Traditional Pathway: Via synapses, where neurotransmitters bridge small gaps between neurons. ❖ New Finding - Dendritic Nanotubes (DNTs): <ul style="list-style-type: none"> ➤ Provide direct electrical connectivity between neurons. ➤ Enable protein transfer, including amyloid-beta linked to Alzheimer's disease. ➤ Suggest a faster and more integrated neural communication network.

Topic 11 - Crew Escape System (CES)

Syllabus	Science & Technology Space Missions
Context	ISRO has unveiled the working of the Crew Escape System (CES) - a key safety technology under the Gaganyaan Mission , designed to protect astronauts during launch emergencies.
What is the Crew Escape System?	<ul style="list-style-type: none"> ❖ Definition: A rapid-acting emergency ejection system that pulls the crew module away from a malfunctioning launch vehicle. ❖ Developer: ISRO, as part of India's Gaganyaan Human Spaceflight Programme. ❖ Objective: To ensure astronaut survival by separating the crew to a safe distance within seconds of detecting a launch failure.
Types of CES	<ul style="list-style-type: none"> ❖ Puller Type (ISRO, Soyuz, Saturn V): Solid motors pull the module away from the rocket. ❖ Pusher Type (SpaceX Falcon 9): Liquid engines push the module away from danger.
Recent Milestone	<ul style="list-style-type: none"> ❖ Pad Abort Test (PAT): Simulates a launch pad emergency. (ISRO successfully conducted PAT in 2018). ❖ Test Vehicle (TV)-D1 Test Flight: Conducted on October 21, 2023, from Sriharikota. <ul style="list-style-type: none"> ➤ Simulated in-flight abort scenario. ➤ The crew module separated successfully and landed in the Bay of Bengal.
Significance	<ul style="list-style-type: none"> ❖ Provides life-saving escape before or during early ascent - the riskiest phase of launch. ❖ Marks India's entry into human-rated launch safety systems, meeting global astronaut safety standards.

Topic 12 - Protecting India's Satellites

Syllabus	Science & Technology Space Missions
Context	India has approved a ₹27,000-crore programme to launch 52 surveillance satellites from 2026.
Need for Satellite Protection	<ul style="list-style-type: none"> ❖ Strategic Importance: Satellites underpin communication (telecom, internet), navigation (NavIC), weather forecasting, internet, defence, and surveillance. ❖ Threats: Space debris, collisions, hostile manoeuvres, jamming, spoofing, cyber intrusions, and solar storms and electromagnetic interference. ❖ High Costs: Billions invested in launch and maintenance; protection ensures ROI and strategic autonomy.



<p>Existing Initiatives</p>	<ul style="list-style-type: none"> ❖ IS4OM Centre (Bengaluru): Tracks Indian satellites and issues collision alerts. ❖ Project NETRA: Expands space situational awareness with radars and telescopes. ❖ Mission Shakti (Anti-Satellite Capability): 2019, deterrent against kinetic threats. ❖ Aditya-L1 Mission: Observes solar storms and coronal mass ejections to safeguard electronics. ❖ CERT-In Guidelines 2025: Enforces encryption, network segmentation, and cyber hygiene for satellite security. ❖ IN-SPACE Licensing: Mandates private firms to adopt safety standards for commercial space. ❖ Debris-Free Space Mission (2030): Commitment to avoid space debris and adopt sustainable practices.
<p>Bodyguard Satellites</p>	<ul style="list-style-type: none"> ❖ Definition: Special satellites designed to escort and protect high-value Indian spacecraft. ❖ Functions: <ul style="list-style-type: none"> ➤ Monitor close approaches of foreign satellites or debris. ➤ Warn against suspicious or hostile proximity operations. ➤ Physically reposition or shield satellites to avoid collisions or jamming. ❖ Global Context: Mirrors the defence trends of major powers developing proximity and protective satellites.
<p>Challenges</p>	<ul style="list-style-type: none"> ❖ Technological: Requires advanced sensors, AI-based autonomy, and precision manoeuvring. ❖ Financial: High cost of development and deployment. ❖ Cybersecurity: Vulnerability of ground stations and user terminals. ❖ Geopolitical: Potential to trigger mistrust or an arms race in outer space. ❖ Sustainability: Must avoid worsening orbital debris or overcrowding.
<p>Way Ahead</p>	<ul style="list-style-type: none"> ❖ Indigenous SSA Tech: Invest in LiDAR, radar, and AI-based tracking satellites. ❖ Anti-Jamming Systems: Encrypted signals, hardened waveforms, and autonomous avoidance technologies. ❖ Public-Private Partnerships: Leverage startups for cost-effective satellite protection solutions. ❖ Global Engagement: Participate in COPUOS, IADC, and multilateral forums to promote responsible space behaviour. ❖ Defensive-First Strategy: Focus on sustainable, non-weaponised measures for satellite security.
<p>Conclusion</p>	<p>A multi-layered approach combining technology, governance, and diplomacy can safeguard orbital assets while promoting peaceful and sustainable space use.</p>

Topic 13 - Interstellar Mapping and Acceleration Probe (IMAP)

Syllabus	Science & Technology Space Technology
Context	NASA has launched the Interstellar Mapping and Acceleration Probe (IMAP) to study how solar particles gain energy and how the Sun's protective bubble, the heliosphere .
About IMAP	<ul style="list-style-type: none"> ❖ Launch Vehicle: SpaceX Falcon 9 ❖ Purpose: To map the heliosphere's boundary and trace the movement and acceleration of energetic particles. ❖ Heliosphere: A vast solar wind bubble surrounding our solar system, acting as a shield against cosmic rays. ❖ Location: Positioned at L1 (first Earth-Sun Lagrange point), around 1 million miles (1.5 million km) from Earth toward the Sun. ❖ Real-Time Monitoring: Sends continuous data to improve space weather forecasting and protect satellites and astronauts.
Scientific Objectives	<ul style="list-style-type: none"> ❖ Uncover how solar and interstellar particles are accelerated and interact. ❖ Enhance solar wind disturbance forecasting and radiation hazard prediction. ❖ Map our local galactic neighborhood and understand the heliosphere's protective role. ❖ Identify basic cosmic building materials and how they influence planetary environments.

Topic 14 - Cassini Spacecraft

Syllabus	Science & Technology Space Technology
Context	NASA's Cassini spacecraft data hints that Saturn's moon Enceladus may have conditions suitable for life.
About the Cassini Spacecraft	<ul style="list-style-type: none"> ❖ Joint Mission: NASA, European Space Agency (ESA), Italian Space Agency (ASI). ❖ Launch: October 15, 1997; reached Saturn in 2004. ❖ Components: <ul style="list-style-type: none"> ➤ Cassini Orbiter: First spacecraft to orbit Saturn. NASA-built; studied Saturn system in detail. ➤ Huygens Probe: ESA-built; landed on Titan (Saturn's largest moon) in 2005 - first landing in outer solar system. ❖ Instruments: Radar, magnetometer, and six Huygens instruments to study Titan's surface and atmosphere. ❖ Updates (2025):

	<ul style="list-style-type: none"> ➤ June 2025: NASA released Cassini's final image before its descent - "The Day Earth Smiled" revisited. ➤ Oct 2025: New analysis of Cassini data shows Enceladus may support microbial life, based on phosphates and amino acids detected.
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Topic 15 - INS Imphal

Syllabus	Science & Technology Defence
Context	INS Imphal , India's indigenously built stealth guided-missile destroyer , recently conducted a Passage Exercise (PASSEX) with the U.S. Navy's USS Gridley , showcasing India's growing naval interoperability and indigenous defence strength.
About INS Imphal (Pennant D68)	<ul style="list-style-type: none"> ❖ Type: Stealth guided-missile destroyer. ❖ Class: Third ship of Project 15B (Visakhapatnam-class) destroyers. ❖ Commissioned: December 2023 into the Indian Navy's Western Fleet. ❖ Built by: Designed by the Warship Design Bureau, built by Mazagon Dock Ltd (MDL). ❖ Significance: <ul style="list-style-type: none"> ➤ First warship named after a Northeast city (Imphal, Manipur). ➤ First Indian naval ship with dedicated accommodation for women officers & sailors.
Technical & Operational Features	<ul style="list-style-type: none"> ❖ Dimensions: Length - 164 m; Displacement - 7500+ tonnes. ❖ Propulsion: Combined Gas and Gas (COGAG) system with gas turbines and diesel engines ❖ Speed: Over 30 knots (~56 km/h).

Ships in the Class

Ship Name	Commissioned	Status
INS Visakhapatnam	Nov 2021	Operational
INS Mormugao	Dec 2022	Operational
INS Imphal	Dec 2023	Operational; PASSEX with US Navy (2025)
INS Surat	Expected 2026	Final sea trials underway

Topic 16 - INS Sutlej

Syllabus	Science & Technology Defence
Context	INS Sutlej recently reached Port Louis, Mauritius , to undertake the 18th Joint Hydrographic Survey .
About INS Sutlej	<ul style="list-style-type: none"> ❖ Type: Hydrographic survey vessel of the Indian Navy (Sandhayak-class). ❖ Built by: Goa Shipyard Limited; Commissioned: 1993. ❖ Base: Kochi, under Southern Naval Command. ❖ Purpose: Produce accurate electronic navigation charts meeting ISO 9002 standards. ❖ Additional Assets: Chetak helicopter and four survey motorboats.

Topic 17 - ICGS Akshar : Fast Patrol Vessel

Syllabus	Science & Technology Defence
Context	ICGS Akshar was recently commissioned at Karaikal, Puducherry.
About Akshar FPV	<ul style="list-style-type: none"> ❖ Class & Series: Second vessel in a series of eight Adamyia-class Fast Patrol Vessels (FPVs). ❖ Builder: Goa Shipyard Limited; >60% indigenous content. ❖ Base: Karaikal, Puducherry, under Commander Coast Guard Region (East).
Adamyia-class Fast Patrol Vessels	<ul style="list-style-type: none"> ❖ A series of eight Fast Patrol Vessels (FPVs) built by Goa Shipyard Ltd. (GSL). ❖ Designed for quick-reaction coastal operations, EEZ patrol, and multi-mission roles. ❖ Adamyia-class FPVs: ICGS Adamyia, ICGS Akshar, ICGS Amulya, ICGS Akshay, ICGS Achal, ICGS Atal, ICGS Ajit, ICGS Aparajit.

Topic 18 - Androth Anti-Submarine Warfare Ship

Syllabus	Science & Technology Defence
Context	The Indian Navy inducted ' Androth ', the second Anti-Submarine Warfare Shallow Water Craft (ASW-SWC) , boosting coastal and anti-submarine capabilities. It reflects India's push for indigenous defence production under Aatmanirbhar Bharat .
About Androth ASW-SWC	<ul style="list-style-type: none"> ❖ Type: Indigenously built ASW-SWC, second in an 8-ship series (Arnala-class). ❖ Purpose: Coastal security, anti-submarine patrols, shallow-water operations, especially around Lakshadweep and critical sea lanes. ❖ Built By: Garden Reach Shipbuilders & Engineers (GRSE), Kolkata.

	<ul style="list-style-type: none"> ❖ Key Features <ul style="list-style-type: none"> ➤ Size & Propulsion: ~77 metres, Diesel engine + waterjet combination (first in Indian Navy), highly manoeuvrable in littoral waters. ➤ Weapon Systems: <ul style="list-style-type: none"> ■ Indigenous lightweight torpedoes ■ Anti-submarine warfare rockets ➤ Surveillance: Advanced sonar and sensors for submarine detection. ➤ Indigenous Content: >80% made in India → reduces import dependence.
Arnala class ASW SWCs	<ul style="list-style-type: none"> ❖ INS Arnala, INS Anjadip, INS Amini, INS Agray, INS Androth, INS Akshay, INS Azhikkal and INS Ajay.

Topic 19 - Dhvani Missile	
Syllabus	Science & Technology Defence
Context	India's DRDO is set to test Dhvani , a hypersonic missile designed to enhance India's strategic capabilities.
About Dhvani Missile	<ul style="list-style-type: none"> ❖ Type: Hypersonic Glide Vehicle (HGV) missile. ❖ Developer: Defence Research and Development Organisation (DRDO), India. ❖ Flight Profile: Launched to extreme altitudes, then glides at hypersonic speeds toward targets. ❖ Speed: Exceeds Mach 6+ (~7,400 km/h). ❖ Range: Estimated 6,000–10,000 km. ❖ Propulsion: Two-Stage System: Solid rocket booster followed by a scramjet engine/hypersonic glide vehicle. ❖ Target Capability: Precision strike on land and maritime targets.
Design & Features	<ul style="list-style-type: none"> ❖ Configuration: Blended wing-body, approx. 9 m length × 2.5 m width. ❖ Heat Protection: Ultra-high-temperature ceramic composites withstand 2,000–3,000°C during reentry. ❖ Stealth: Angled surfaces and smooth contours reduce radar detection, enhancing survivability. ❖ Maneuverability: Advanced glide technology makes interception extremely difficult.

**Topic 20 - AMRAAM Missile**

Syllabus	Science & Technology Defence
Context	The U.S. has included Pakistan in a modified arms contract with Raytheon Technologies for the supply of AIM-120 AMRAAM (Advanced Medium-Range Air-to-Air Missiles) .
About AMRAAM Missile	<ul style="list-style-type: none"> ❖ The AIM-120 AMRAAM is a Beyond-Visual-Range (BVR), radar-guided air-to-air missile. ❖ Developed jointly by the U.S. Air Force and Raytheon in the 1980s. ❖ Known for its "fire-and-forget" capability — once launched, it autonomously locks and tracks the target using onboard radar, freeing the pilot to disengage. ❖ Range: Up to 160 km (for advanced variants like C8/D3). ❖ Speed: Up to Mach 4. ❖ Guidance System: Inertial Navigation + Active Radar Homing.

Topic 21 - Fatah-IV Missile

Syllabus	Science & Technology Defence
Context	Pakistan has recently tested its indigenously developed long-range Ground-Launched Cruise Missile (GLCM) - Fatah-IV , marking a major advancement in its conventional strike capabilities.
Key Features	<ul style="list-style-type: none"> ❖ Type: Long-range conventional cruise missile (non-nuclear). ❖ Range: ~750 km, capable of striking deep targets with precision. ❖ Speed: Mach 0.7 (865 kmph) - subsonic but highly accurate.

Environment & Geography

Topic 1 - Phytosaur Fossil

Topic	Geography Indian History Geo Heritage
Context	Fossilised remains discovered in Megha village, Jaisalmer , Rajasthan, may belong to a Phytosaur , a large semi-aquatic reptile from the Late Triassic-Jurassic period.
What Is It?	<ul style="list-style-type: none"> ❖ Phytosaurs: Extinct semi-aquatic reptiles resembling modern crocodiles, order Phytosauria. ❖ Time Period: Late Triassic to Early Jurassic. ❖ Characteristics: Long snouts, heavy armour, and diverse feeding adaptations.
Fossil Details	<ul style="list-style-type: none"> ❖ Location: Megha village, Fatehgarh subdivision, Jaisalmer, Rajasthan. ❖ Earlier Finds in Region: Dinosaur fossils (Akal, Thaiyat), shark and marine fossils.

Topic 2 - Erra Matti Dibbalu (Red Sand Dunes)

Topic	Geography Indian History Geo Heritage
Context	Erra Matti Dibbalu, or Red Sand Dunes, near Visakhapatnam in Andhra Pradesh, has gained global recognition by being included in UNESCO's Tentative List of World Natural Heritage Sites .
About Erra Matti Dibbalu	<ul style="list-style-type: none"> ❖ Location & Status: National Geo-heritage Monument along the Bay of Bengal coast, near Visakhapatnam; covers ~1,500 acres. ❖ Formation: Dates back to the late Quaternary Age (~2.6 million years ago), preserving evidence of climate oscillations and sea-level changes. ❖ Historical Documentation: First recorded in 1886 by British geologist William King. ❖ National Recognition: Declared a National Geo-heritage Monument in 2016 by the Geological Survey of India (GSI).
Key Features	<ul style="list-style-type: none"> ❖ Composition: Sand, silt, and clay with a distinctive reddish hue due to natural oxidation. ❖ Geomorphology: Exhibits dendritic drainage patterns and layered sediments acting as natural climate archives. ❖ Rarity: Only two other comparable sites exist globally — one in Sri Lanka and one in Tamil Nadu.

Topic 3 - Air Pollution

Syllabus	Environment Pollution
Context	EPIC (University of Chicago) reports show PM2.5 levels far exceed WHO guidelines, reducing life expectancy by 3.5 years on average , making it deadlier than malnutrition, tobacco, or unsafe water.
Key Findings	<ul style="list-style-type: none"> ❖ PM2.5 Levels: Average annual concentration in 2023 was 8× WHO limits. ❖ Life Expectancy: Meeting WHO standards could add 9.4 months nationally, 8.2 years in Delhi. ❖ Geography: Northern Plains (Delhi, UP, Bihar, Punjab, Haryana) are most affected due to stubble burning, industries, and traffic. ❖ Comparative Threat: Air pollution exceeds malnutrition and communicable diseases in mortality impact.
Health Impacts	<ul style="list-style-type: none"> ❖ Respiratory: Rising COPD, asthma, bronchitis. ❖ Cardiovascular: Linked to hypertension, stroke, and ischemic heart disease. ❖ Vulnerable Groups: Children (stunted lung growth) and the elderly are most affected. ❖ Silent Hazard: Often invisible, causing a chronic health burden.
Economic Impacts	<ul style="list-style-type: none"> ❖ Productivity Loss: ~8.5% of GDP lost annually (World Bank, 2022). ❖ Healthcare Costs: High out-of-pocket expenses for pollution-linked illnesses. ❖ Investment: Polluted cities deter investors and a skilled workforce.
Environmental Dimensions	<ul style="list-style-type: none"> ❖ Transboundary Pollution: Indo-Gangetic haze affects Nepal and Bangladesh. ❖ Agricultural Link: Stubble burning is a major contributor in North India. ❖ Climate Link: Black carbon & methane accelerate global warming, linking health and climate.
Governance & Policy	<ul style="list-style-type: none"> ❖ National Clean Air Programme (NCAP): Targets 20–30% PM reduction by 2026; 131 non-attainment cities. ❖ Sectoral Initiatives: PM Kusum, PM Surya Ghar, FAME II for clean energy and EV adoption. ❖ Challenges: Weak Centre-State coordination, poor monitoring in small towns, and regional pollution diversity.
Way Forward	<ul style="list-style-type: none"> ❖ Regulation & Standards: <ul style="list-style-type: none"> ➤ Align national PM standards closer to WHO. ➤ Enforce stricter industrial and vehicular penalties. ❖ Sectoral Strategies: <ul style="list-style-type: none"> ➤ Transport: Promote EVs, public transport, BS-VI compliance. ➤ Agriculture: Incentivise stubble management, biomass-to-energy conversion.

	<ul style="list-style-type: none"> ➤ Industry: FGD in thermal plants, green hydrogen adoption. ➤ Urban Planning: Dust control, waste management, urban greening. ❖ Technological Measures: <ul style="list-style-type: none"> ➤ Expand real-time monitoring networks. ➤ Use satellite data & AI for source analysis. ❖ Awareness & Behavioural Change: <ul style="list-style-type: none"> ➤ Public campaigns against open burning. ➤ School & community-level education. ❖ International & Regional Cooperation: <ul style="list-style-type: none"> ➤ Engage UNEP, WHO, climate finance, and technical assistance. ➤ Coordinate with neighbouring countries to tackle transboundary haze.
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Topic 4 - Record CO₂ Rise in 2024	
Syllabus	Environment Climate Change
Context	The World Meteorological Organization (WMO) reported a record 3.5 ppm surge in CO₂ levels in 2024 - the sharpest annual rise ever - taking global concentration to 423.9 ppm , marking the warmest year on record .
Record CO₂ Surge: Key Facts	<ul style="list-style-type: none"> ❖ CO₂ concentration hit 423.9 ppm in 2024, up 3.5 ppm from 2023 - the highest rise since 1957. ❖ Current level is 152% higher than pre-industrial (278 ppm). ❖ Global CO₂ has never declined in 40 years; the growth rate tripled from 0.8 ppm (1960s) to 2.4 ppm (2011–2020), now spiking further. ❖ The data signals a failure of Paris Agreement goals and worsening global warming.
Sources of CO₂ Emissions	<ul style="list-style-type: none"> ❖ Natural: Respiration, decomposition, wildfires, volcanoes. ❖ Human-induced: Fossil fuel burning, industry, and deforestation. ❖ Natural systems reabsorb most of their CO₂, but only 50% of human emissions are absorbed, leaving the rest to accumulate and trap heat.
CO₂'s Role Among Greenhouse Gases	<ul style="list-style-type: none"> ❖ CO₂: ~66% of total global warming since the pre-industrial era. ❖ Methane (CH₄): 25× more potent but short-lived (12–14 years). ❖ Nitrous Oxide (N₂O): 270× stronger, lasting 100+ years. ❖ CO₂ persists for centuries, making its warming impact cumulative and irreversible without deep emission cuts.
Why 2024 Saw an	<ul style="list-style-type: none"> ❖ Reduced absorption by natural sinks: <ul style="list-style-type: none"> ➤ Warmer oceans absorb less CO₂. ➤ Droughts & forest fires reduced land absorption.

Unprecedented Rise	<ul style="list-style-type: none"> ❖ Feedback loop: Global warming weakens carbon sinks, leading to even higher CO₂ buildup - a self-reinforcing cycle.
Methane & Nitrous Oxide Trends (2024)	<ul style="list-style-type: none"> ❖ Methane (CH₄): +8 ppb to 1,942 ppb (slower rise). ❖ Nitrous Oxide (N₂O): +1 ppb to 338 ppb. ❖ Cumulative warming impact: CH₄ - 16%, N₂O - 6%, CO₂ & others - 78% of total warming.
Climate Crisis Deepens: Policy & Natural Failures	<ul style="list-style-type: none"> ❖ Both human emissions and weakened natural systems now drive gas buildup. ❖ Forests and oceans - once carbon absorbers - are turning less effective. ❖ Despite a decade of the Paris Agreement, global emissions continue to rise, with 2030 targets unlikely to be met. ❖ The 1.5°C threshold breach for an entire year signals accelerating and possibly irreversible climate change.

Topic 5 - Kanha Tiger Reserve	
Syllabus	Environment & Wildlife
Context	Kanha Tiger Reserve (Madhya Pradesh) recently reported the death of three tigers, including two female cubs.
About Kanha Tiger Reserve	<ul style="list-style-type: none"> ❖ Location: Maikal Ranges, Satpuras, Madhya Pradesh. ❖ Declared a National Park in 1955, became a Tiger Reserve in 1973 under Project Tiger. ❖ Corridors: <ul style="list-style-type: none"> ➤ Connected to Pench and Achanakmar Tiger Reserves. ❖ Tribal Communities: The Gond and Baiga tribes inhabit the region. ❖ Cultural Link: The reserve's forests are widely believed to have been the inspiration for the setting of Rudyard Kipling's The Jungle Book. ❖ Known for pioneering the Barasingha (swamp deer) conservation program. Kanha is the only place in the world where this sub-species of swamp deer survives. <ul style="list-style-type: none"> ➤ Mascot: "Bhoorsingh the Barasingha" - first official tiger reserve mascot in India. ❖ Monitoring: Utilizes advanced monitoring techniques, including Phase IV Tiger Monitoring and M-STrIPES (Monitoring System for Tigers - Intensive Protection and Ecological Status).

**Topic 6 - Gandhi Sagar Wildlife Sanctuary**

Syllabus	Environment & Wildlife
Context	Madhya Pradesh has launched a cheetah mating programme at Gandhi Sagar Wildlife Sanctuary , creating a second viable habitat for cheetahs in India after Kuno National Park .
About Gandhi Sagar Wildlife Sanctuary	<ul style="list-style-type: none"> ❖ Location: Northern Mandsaur & Neemuch districts, MP; borders Rajasthan. ❖ Area & Geography: 368.62 sq. km; bisected by the Chambal River, a mix of grasslands and dry forests. ❖ Established: Notified in 1974, expanded in 1983. ❖ Flora: Khair, Salai, Kardhai, Tendu, Palash. ❖ Fauna: Cheetah, chinkara, sambar, nilgai, leopard, wild dog, otter, peacock, mugger crocodile. ❖ Cultural Sites: Chaturbhuj Nath temple, Hinglajgarh Fort, Bhadkaji rock paintings, and Dharmrajeshwar caves.
Cheetah Mating Programme	<ul style="list-style-type: none"> ❖ Objective: Build a self-sustaining cheetah population, reduce dependence on Kuno, and restore the grassland ecosystem. ❖ Pre-Mating Monitoring: Male & female in separate enclosures; behaviour tracked to prevent aggression. ❖ Predation Management: 17 leopards relocated to reduce risk. ❖ Nutrition: Prey supplementation; 15–20 kg feed every 3–4 days during gestation. ❖ Veterinary Care: Biweekly pregnancy checks, remote den monitoring, post-birth cub health assessments.

Topic 7 - The Forest Declaration Assessment

Syllabus	Ecology & Environment Biodiversity
Context	The Forest Declaration Assessment 2025 warns that the world is 63% off-track to meet the zero deforestation by 2030 goal, as global forest loss hit 8.1 million hectares in 2024 despite global pledges under the Glasgow and Kunming-Montreal Declarations .
Global Forests in Crisis	<ul style="list-style-type: none"> ❖ Deforestation & Degradation: 8.1 M ha deforested and 8.8 M ha degraded in 2024 - 94% in tropical regions. ❖ Carbon Impact: 3.1 Gt CO₂e emitted, ≈150% of U.S. energy emissions. ❖ Biodiversity Decline: 2.2 M ha loss in key biodiversity areas (fKBAs), escalating extinction risk.

	<ul style="list-style-type: none"> ❖ Restoration Lag: Only 10.6 M ha restored - just 0.3% of global potential, far below 2030 targets.
Key Drivers of Forest Loss	<ul style="list-style-type: none"> ❖ Agricultural Expansion: Permanent agriculture (oil palm, cacao, rubber, pasture) – 86% of deforestation. ❖ Mining & Infrastructure: Roads and extraction projects fragment habitats. 77% of global mines within 50 km of key biodiversity areas (KBAs). ❖ Environmental crimes (illegal logging, land grabbing) – worth \$281 billion annually. ❖ Forest Fires: Amazon fires in 2024 emitted 791 Mt CO₂e. ❖ Weak Governance: Corruption and poor law enforcement fuel illegal clearing. ❖ Unsustainable Consumption: Developed nations’ imports drive indirect deforestation. ❖ Rights Neglect: The rights of Indigenous Peoples and Local Communities are largely ignored, despite the fact that forests managed by these communities consistently show the lowest rates of deforestation.
Global & National Restoration Efforts	<ul style="list-style-type: none"> ❖ Quality over quantity: Focus on long-term survival and canopy growth. ❖ Credibility & sustainability: 57,986 ha of degraded land registered; revised rules expected to enhance trust and effectiveness. ❖ Moves away from tokenistic tree-plantation drives.
Key Challenges	<ul style="list-style-type: none"> ❖ Poor Financing: Forest projects get <10% of global climate finance. ❖ Fragmented Data: Platforms like FERM, Restor, and GFW (Global Forest Watch) lack integration. ❖ Policy Contradictions: Subsidies still favour deforestation-linked activities. ❖ Weak Community Rights: Indigenous communities lack tenure and decision-making power. ❖ Low-Quality Restoration: Focus remains on tree count, not ecological recovery.
Recommendations	<ul style="list-style-type: none"> ❖ Legally Binding Targets: Convert pledges into enforceable national laws with audits and progress tracking. ❖ Redirect Finance: Incentivise deforestation-free supply chains and green-certified commodities. ❖ Empower Communities: Recognise Indigenous rights and promote participatory forest governance. ❖ Integrated Monitoring: Merge global forest data systems for real-time tracking and transparency. ❖ Nature-Positive Agriculture: Promote regenerative farming and agroforestry to balance productivity and conservation.

**Topic 8 - Ageing Dams in India**

Syllabus	Geography Infrastructure Water Resources
Context	India faces a critical challenge with ageing dams - over 1,065 dams are 50-100 years old, and 224 are over a century old (2023 data).
History of Dams in India	<ul style="list-style-type: none"> ❖ Pre-Independence: <ul style="list-style-type: none"> ➤ Kallanai (2nd century CE) - one of the world's oldest functioning dams. ➤ Mettur (1934) & Nizam Sagar (1931) - early modern reservoirs. ❖ Colonial Era: <ul style="list-style-type: none"> ➤ Krishna & Godavari anicuts for canal irrigation. ➤ The concept of the Damodar Valley Corporation was modeled on the Tennessee Valley. ❖ Post-Independence: <ul style="list-style-type: none"> ➤ Bhakra-Nangal (1963), Hirakud (1957), Tungabhadra, Koyna — “temples of modern India.” ➤ 1951-71: 418 large dams built for irrigation, power, and flood control. ❖ Modern Era: <ul style="list-style-type: none"> ➤ Multipurpose projects integrating irrigation, power, tourism, and fisheries. ➤ Current focus: rehabilitation, modernization, climate resilience.
Laws & Policies	<ul style="list-style-type: none"> ❖ Dam Safety Act, 2021: <ul style="list-style-type: none"> ➤ Legal framework for surveillance, operation, and maintenance. ➤ Establishes NDSA, State Dam Safety Organisations (SDSOs). ❖ Mandatory Inspections: Pre- and post-monsoon checks, Emergency Action Plans, and inundation maps. ❖ Dam Rehabilitation & Improvement Project (DRIP I-III): <ul style="list-style-type: none"> ➤ Covers 736 dams across 19 States. ➤ Structural strengthening, gate replacement, monitoring, and staff training. ❖ Central Water Commission (CWC) Guidelines: Periodic safety reviews, risk assessment, and remedial action. ❖ No Formal Decommissioning Policy: Focus on life extension; a safe retirement framework is absent.
Challenges	<ul style="list-style-type: none"> ❖ Ageing Infrastructure: <ul style="list-style-type: none"> ➤ 4,200+ dams to cross 50-year mark by 2050. ➤ Old spillways are inadequate for modern flood levels. ❖ Sedimentation & Capacity Loss: <ul style="list-style-type: none"> ➤ Bhakra, Hirakud, and Lower Bhavani lost 20-30% storage. ➤ Reduced irrigation, hydropower, and drinking water supply. ❖ Climate & Extreme Events: <ul style="list-style-type: none"> ➤ Cloudbursts, GLOFs (Sikkim 2023), and heavy monsoons stress dams.



	<ul style="list-style-type: none"> ❖ Seismic & Geotechnical Risks: <ul style="list-style-type: none"> ➤ Mullaperiyar & Koyna are in active seismic zones. ➤ Cracks, seepage, and foundation erosion threaten stability. ❖ Institutional Gaps: <ul style="list-style-type: none"> ➤ Limited data transparency and citizen participation. ➤ Slow rehabilitation project execution.
Case Studies	<ul style="list-style-type: none"> ❖ Mullaperiyar Dam (1895): Inter-state safety dispute, seismic vulnerability. ❖ Hirakud Dam (1957): 25% capacity loss; auxiliary spillway added. ❖ Bhakra Nangal (1963): Sedimentation reduced capacity by 23%; seismic reanalysis ongoing. ❖ Tiware Dam Failure (2019): Breach caused 19 deaths; highlighted inspection gaps.
Way Forward	<ul style="list-style-type: none"> ❖ Risk-Based Prioritisation: <ul style="list-style-type: none"> ➤ Audit high-consequence dams first (population, economic value). ➤ Independent third-party safety assessments. ❖ Infrastructure Strengthening: <ul style="list-style-type: none"> ➤ Retrofit spillways, reinforce structures for seismic & climate resilience. ➤ Catchment treatment to reduce silt inflow. ❖ Decommissioning & Repurposing: <ul style="list-style-type: none"> ➤ Develop a policy for the safe retirement of unsafe dams. ➤ Explore alternate storage: aquifer recharge, check dams. ❖ Community Engagement & Transparency: <ul style="list-style-type: none"> ➤ Hazard mapping, public warning systems, mock drills. ➤ Open-access dam safety databases. ❖ Climate-Resilient Design- Incorporate probable maximum flood, GLOF, glacial retreat modeling.

**Topic 9 - Legal Provisions for Acquisition of Animals**

Topic	Environment Wildlife Conservation
Context	The Supreme Court SIT confirmed Reliance-owned Vantara's animal acquisition complied with all legal requirements under wildlife and trade laws, highlighting the framework of regulated animal possession in India.
Wildlife (Protection) Act, 1972	<ul style="list-style-type: none"> ❖ Purpose: Protect wildlife, habitats, regulate human-wildlife interaction, and prevent species extinction. ❖ Aim: <ul style="list-style-type: none"> ➤ Safeguard wild animals, birds, and plants. ➤ Establish protected areas and conservation protocols. ➤ Regulate hunting, captivity, trade, and possession of wildlife products. ❖ Key Features: <ul style="list-style-type: none"> ➤ Schedules I-VI: Classify species by protection level (absolute protection for Schedules I & II; Schedule VI regulates certain plants). (Amended 2022 - now 4 schedules). ➤ Protected Areas: National Parks, Wildlife Sanctuaries, Conservation & Community Reserves. ➤ Hunting: Ban on endangered species; permits for scientific or population control purposes. ➤ Wildlife Crime Control Bureau (WCCB): Monitors wildlife crimes and illegal trade. ➤ Zoo Regulation: The Central Zoo Authority regulates the management and recognition of zoos. ➤ Penalties: Stringent fines/imprisonment for offences, especially involving Schedule I species.
Legal Provisions for Acquisition of Animals	<ul style="list-style-type: none"> ❖ Acquisition & Possession: <ul style="list-style-type: none"> ➤ Sections 40 & 42 → Prior permission from the Chief Wildlife Warden (CWW) required. ➤ Section 43 → Transfer by sale/offer prohibited without CWW permission. ➤ Sections 49 & 49B → Regulate trade and transport of scheduled animals. ❖ Process: <ul style="list-style-type: none"> ➤ Application: Submit species, purpose, and source to CWW. ➤ Verification: Authority checks legality (zoos, rescue centres, permitted foreign sources). ➤ Permit/License: Issued under Zoo Rules, 2009, or CITES for international trade. ➤ Transport & Quarantine: Comply with IATA Live Animal Regulations; mandatory veterinary quarantine.

➤ **Reporting:** Maintain records and submit periodic inventories to authorities.

Topic 10 - The Sawalkote Hydro Project

Syllabus	Environment Infrastructure
Context	The Union Environment Ministry's Expert Appraisal Committee (EAC) has granted fresh environmental clearance to the Sawalkote Hydroelectric Project on the Chenab River , Jammu & Kashmir.
About the Project	<ul style="list-style-type: none"> ❖ Location: Ramban district, Jammu & Kashmir. ❖ Type: Run-of-the-river hydroelectric project on the Chenab River (tributary of Indus). ❖ Executed by NHPC Ltd. (National Hydroelectric Power Corporation). ❖ Objective: Harness the Chenab River's flow for clean and renewable energy generation. ❖ Key Features <ul style="list-style-type: none"> ➤ Installed Capacity: 1,856 MW <ul style="list-style-type: none"> ■ Stage I - 1,406 MW ■ Stage II - 450 MW ➤ Dam Type: 192.5 m concrete gravity dam. ➤ Revised Project Cost: ₹31,380 crore (from ₹22,000 crore).

Topic 11 - Ichamati River

Syllabus	Indian Geography Rivers
Context	The Ichamati River , a transboundary river between India and Bangladesh , has seen increased security along the border during Durga Puja immersions due to its strategic and cultural significance.
About Ichamati River	<ul style="list-style-type: none"> ❖ Type: Trans-boundary river; forms part of the India-Bangladesh border. ❖ Originates from a bifurcation of the Mathabhanga River, a distributary of the Padma. ❖ Course: Flows through Nadia & North 24 Parganas (India) → Satkhira & Khulna (Bangladesh). ❖ Length: ~216 km. ❖ Outflow: Joins Kalindi River at Hasnabad → empties into Bay of Bengal near Moore Island. ❖ It forms part of a large oxbow lake complex near Bangaon, North 24 Parganas.



Topic 12 - Cyclone Shakhti

Topic	Physical Geography Cyclones
Context	The Indian Meteorological Department (IMD) has confirmed the formation of Cyclone Shakhti over the northeast Arabian Sea.
What is Cyclone Shakhti?	<ul style="list-style-type: none">❖ A tropical cyclonic storm formed ~340 km west of Dwarka, Gujarat.❖ Named 'Shakhti' by Sri Lanka, following WMO/ESCAP naming conventions.
Origin & Development	<ul style="list-style-type: none">❖ Developed from a low-pressure system over the warm Arabian Sea in early October 2025.❖ Strengthened into a Cyclonic Storm (CS) on 3 October; forecasted to become a Severe Cyclonic Storm (SCS) moving west-southwest.

Topic 13 - Periyar Tiger Reserve (PTR)

Topic	Environment & Biodiversity Wildlife
Context	Periyar Tiger Reserve (Kerala) is a UNESCO-listed Project Tiger Reserve noted for biodiversity, participatory forest management, and community-based ecotourism.
Key Facts	<ul style="list-style-type: none">❖ Location: Cardamom & Pandalam Hills, Southern Western Ghats; spans Idukki, Kottayam, Pathanamthitta districts.❖ Declared Periyar Wildlife Sanctuary in 1950, became India's 10th Tiger Reserve in 1978 under Project Tiger.❖ Recognition: NTCA Best Managed Tiger Reserve 2022.❖ Current Updates (2025): 12 new species discovered: 8 butterflies, 2 birds, 2 dragonflies.

SMA, SBL and Ethics

Topic 1 - Ethics at the Heart of Global Climate Action

Syllabus	Ethics & Global Governance International Relations
Context	COP30 negotiations in Brazil highlight the critical role of ethics in climate governance. The launch of the Global Ethical Stocktake aims to place justice, equity, and responsibility at the core of global climate action.
Ethical Dimensions of Climate Change	<ul style="list-style-type: none"> ❖ Justice and Equity: <ul style="list-style-type: none"> ➤ The principle of “common but differentiated responsibilities” under UNFCCC assigns historical responsibility to developed nations while allowing sustainable growth space for developing nations. ➤ E.g.: Paris Agreement’s “leave no one behind” principle aligns with distributive justice. ❖ Intergenerational Responsibility: <ul style="list-style-type: none"> ➤ Current actions affect future generations; ethics demands stewardship, not exploitation. ➤ E.g.: ICJ (2025) reaffirmed intergenerational equity as central to climate treaties. ❖ Human Rights Linkage: <ul style="list-style-type: none"> ➤ Access to food, water, housing, and a healthy environment is inseparable from the right to life (Article 21). ➤ E.g., the International Court of Justice (2025) recognised the right to climate as a fundamental human right. ❖ Integrity and Credibility: <ul style="list-style-type: none"> ➤ Ethical governance demands accountability, transparency, and honesty in NDCs. ➤ E.g.: Corporate greenwashing erodes public trust in climate commitments. ❖ Solidarity with the Vulnerable: <ul style="list-style-type: none"> ➤ Marginalised communities and the Global South face disproportionate risks; ethics call for inclusive adaptation strategies. ➤ E.g.: Community-based conservation in Himachal Pradesh (snow leopard surveys) demonstrates ethical inclusion.
Role of Ethics in Climate Governance	<ul style="list-style-type: none"> ❖ Guiding Negotiators: Ensures moral responsibility beyond political bargaining; delays equal human suffering. ❖ Embedding Ethical Frameworks: Initiatives like the Global Ethical Stocktake institutionalise ethics in negotiations. ❖ Courts as Ethical Guardians: Judicial interventions link law and morality, enforcing due diligence.



	<ul style="list-style-type: none"> ❖ CSR in Climate: Businesses must align with responsibility ethics to avoid tokenistic pledges.
Ethics and Indian Context	<ul style="list-style-type: none"> ❖ Constitutional Mandates: <ul style="list-style-type: none"> ➤ Article 48A – State duty to protect the environment. ➤ Article 51A(g) – Citizens' duty to protect natural resources. ❖ Judicial Precedents: Vellore Citizens' Forum vs Union of India (1996) upheld the precautionary principle and polluter pays principle. ❖ Gandhian Perspective: Trusteeship promotes sustainable consumption and ethical responsibility toward nature.
Challenges in Ethical Climate Action	<ul style="list-style-type: none"> ❖ National Interest vs Global Good: Developed nations prioritise economic competitiveness, delaying finance and tech transfer. ❖ Political Polarisation & Denialism: Divisive politics and climate denial slow multilateral consensus. ❖ Greenwashing & Weak Enforcement: Exaggerated climate achievements and poor monitoring erode trust. ❖ Underfunded Adaptation Finance: Vulnerable communities lack resources, showing ethical gaps between rhetoric and action.
Way Forward	<ul style="list-style-type: none"> ❖ Institutionalise Global Ethical Stocktake: Regular justice-, equity-, and responsibility-based assessments of climate action. ❖ Just Transition Policies: Safeguard livelihoods while moving away from fossil fuels. ❖ Strengthen Ethical Climate Jurisprudence: Courts to enforce rights-based climate obligations. ❖ Promote Ethical Leadership: Policymakers to prioritise stewardship and fairness over short-term gains. ❖ Integrate Ethical Education: Mainstream climate ethics in schools and training programs.
Conclusion	<p>Ethics is the compass of climate action. Justice, responsibility, and solidarity must guide global governance. Only by embedding ethics in courts, communities, and negotiations can we rebuild trust and secure a liveable planet for present and future generations.</p>

**Topic 2 - Integrity in Public Office**

Syllabus	Ethics Integrity & Corruption
Context	Integrity in public office ensures officials act with honesty, fairness, and accountability, aligning public power with public interest. The Assam case of Nupur Bora highlights severe breaches and the need for systemic vigilance.
What is Integrity	<p>According to Transparency International Knowledge Hub - "Integrity in the public sector refers to the use of powers and resources entrusted to public officials in a manner that is honest, ethical, and in the public interest."</p> <p>Key Features of Integrity</p> <ul style="list-style-type: none"> ❖ Probity & Honesty: Zero tolerance for corruption; refusal to accept undue advantage. ❖ Accountability: Decisions withstand audit, public scrutiny, and legal challenge. ❖ Impartiality: Avoid bias, conflicts of interest; equal treatment to citizens. ❖ Transparency: Open access to decisions, finances, and processes. ❖ Rule of Law: Compliance with Constitution and legal provisions.
Ethical Foundations	<ul style="list-style-type: none"> ❖ Deontological Ethics: Duty-based ethics - actions guided by rules and principles, not outcomes. ❖ Utilitarian Ethics: Greatest good for the greatest number - aims to maximize welfare and minimize harm. ❖ Virtue Ethics: Focus on honesty, courage, fairness as guiding traits. ❖ Social Contract Theory: Public office as a trust, where power must be exercised for the public good. ❖ Gandhian Ethics: Truth (Satya) and Non-violence (Ahimsa) as pillars of moral integrity.
Importance of Integrity	<ul style="list-style-type: none"> ❖ Public Trust: Integrity builds citizen confidence in democracy, encouraging tax compliance and public cooperation. ❖ Fairness & Justice: Ensures merit-based, unbiased decisions, preventing corruption and discrimination. (Rule of law) ❖ Economic Efficiency: Promotes transparency, cuts red tape, curbs corruption, and attracts FDI. ❖ Moral Leadership: Empowers civil servants with ethical courage to uphold law and resist undue influence. → Inspires ethical behaviour in society.
Challenges	<ul style="list-style-type: none"> ❖ Political Interference: Pressure in transfers, postings, and decisions erodes neutrality and integrity. ❖ Corruption & Weak Accountability: Despite Lokpal and anti-corruption laws, poor enforcement sustains both petty and grand corruption.



	<ul style="list-style-type: none"> ❖ Transparency: RTI amendments and CIC/SIC vacancies weaken oversight and public scrutiny. ❖ Cultural Tolerance: Acceptance of minor ethical lapses fosters larger violations over time. ❖ Ethics-Law Gap: Officers face moral dilemmas between obeying superiors and upholding public interest. ❖ Low deterrence due to slow trials and weak convictions.
Role of Prevention of Corruption (Amendment) Act, 2018	<ul style="list-style-type: none"> ❖ Expands the definition of “undue advantage” to cash, gifts, favours, and non-monetary gratifications. ❖ Bribe givers are punishable; whistleblowers are protected. ❖ Corporate liability for employee bribery exists unless preventive systems exist. ❖ Time-bound trials: 2 years (extendable to 4). ❖ Seizure of illicit assets to deprive wrongdoers of illegal gains.
Measures to Strengthen Integrity (Way Forward)	
Institutional Reforms (Structural)	Ethical & Behavioural Reforms (Cultural)
Empower Vigilance Bodies: Strengthen CVC and ensure swift prosecution of corruption cases.	Value-Based Training: Include ethics modules with case studies & role-play in service training.
Protect Whistleblowers: Enforce the Whistleblower Protection Act effectively.	Code of Ethics: Adopt an enforceable ethics code focusing on service spirit, not just rules.
Reduce Discretion: Promote e-governance and objective criteria to curb rent-seeking.	Leadership by Example: Senior officers must model ethical consistency and integrity.
Fixed Tenure: Ensure stable postings to reduce political pressure.	Public Participation: Encourage social audits and RTI-based accountability .
Conclusion	Integrity is the backbone of public service. The Nupur Bora case underscores the urgency to strengthen preventive vigilance, ensure swift punitive action, and foster an ethical bureaucratic culture through legal reforms and systemic checks.

**Topic 3 - Safeguarding India's Digital Economy**

Syllabus	Law Economy & Cybersecurity
Context	India's digital economy faces growing threats from sophisticated cyber frauds such as phishing, UPI/OTP scams, identity theft, and "digital arrests."
Cybercrime Landscape in India	<ul style="list-style-type: none"> ❖ Scale of the Problem: 13.9 lakh cybercrime cases reported in 2023 (NCRB); many remain unreported due to stigma or institutional distrust. ❖ Tactics Used: Social engineering exploiting fear, greed, and urgency - phishing, OTP/UPI frauds, loan/job scams, remote access malware, fake government impersonations. ❖ Vulnerable Groups: <ul style="list-style-type: none"> ➤ Elderly and rural citizens: digitally illiterate and financially exposed. ➤ Banks: often issue generic advisories, weak KYC, and fail to detect abnormal transactions. ➤ Cyber police: insufficient manpower, training, and AI-driven tools.
Constitutional and Institutional Dimensions	<ul style="list-style-type: none"> ❖ Right to Privacy (Justice K.S. Puttaswamy vs Union of India, 2017): Personal and financial data protected under Article 21. ❖ Article 300A: Digital fraud threatens citizens' property rights. ❖ RBI Regulations: Zero liability protection for victims in certain fraud categories. ❖ CERT-In: Nodal cybersecurity agency under the IT Act, but limited to retail-level monitoring.
Threats to India's Digital Economy	<ul style="list-style-type: none"> ❖ Social Engineering Fraud: Phishing, OTP/UPI scams, fake government calls; e.g., 2025 "digital arrest" scam siphoned ₹23 crore from a retired banker. ❖ Identity Theft & Data Breach: Misuse of Aadhaar, PAN, and Bank Details due to data leaks and poor encryption. ❖ Mule Accounts & Money Laundering: Weak KYC enables fund layering, complicating recovery. ❖ Institutional Negligence: Banks fail to monitor high-value transactions; cyber police are under-equipped. ❖ Cross-Border Scams: International fraud networks exploit jurisdictional gaps. ❖ Ransomware, DDoS attacks targeting Critical Information Infrastructure (CII) in sectors like Power, Telecom, Finance, Transport.
Initiatives Taken So Far	<ul style="list-style-type: none"> ❖ Regulatory Safeguards: <ul style="list-style-type: none"> ➤ RBI zero liability policy. ➤ Digital Personal Data Protection Act, 2023. ❖ Institutional Mechanisms: <ul style="list-style-type: none"> ➤ CERT-In for cybersecurity incident reporting. ➤ Indian Cyber Crime Coordination Centre (I4C) for inter-agency coordination.

	<ul style="list-style-type: none"> ➤ National Critical Information Infrastructure Protection Centre (NCIIPC): Protects CII (Power, Telecom, Banking, etc.). ❖ Awareness Campaigns: RBI's Cyber Jagrookta Abhiyan and 'RBI Kehta Hai' campaigns. ❖ Technological Steps: AI-based anomaly detection by banks; National Cyber Crime Reporting Portal.
Recommended Measures	<ul style="list-style-type: none"> ❖ Technology & AI Integration: Real-time anomaly detection, personalised transaction profiling, blockchain for tamper-proof KYC. ❖ Strengthen Cyber Police: 24/7 rapid response units, forensic labs, global-standard training. ❖ Bank Accountability: Enforce strict KYC, freeze mule accounts, and mandate real-time fraud alerts. ❖ Cross-Institutional Cooperation: National Fraud Intelligence Grid linking banks, telecoms, and enforcement agencies. ❖ Citizen Empowerment: Targeted digital literacy drives for seniors, rural communities, and students. ❖ Global Coordination: Enhance Interpol, FATF, and bilateral cyber treaties to track international fraud networks.
Conclusion	<p>Safeguarding India's digital economy requires proactive prevention, AI-enabled monitoring, and robust institutional accountability. Empowered cyber police, responsible banks, and digitally literate citizens are crucial to counter evolving fraud tactics and ensure a resilient, trustworthy digital ecosystem.</p>

Topic 4 - India's Cough Syrup Tragedy	
Syllabus	Health, Regulation & Governance
Context	The death of at least 16 children in Madhya Pradesh and Rajasthan after consuming Coldrif cough syrup (found to contain 48% diethylene glycol - 480× the safe limit) has exposed deep flaws in India's drug manufacturing and regulatory system .
Root Causes Behind the Tragedy	<ul style="list-style-type: none"> ❖ Toxic Substitutes & Cost-Cutting: <ul style="list-style-type: none"> ➤ Manufacturers used industrial-grade DEG/ethylene glycol instead of safe solvents to reduce costs. ➤ This indicates criminal negligence, not ignorance. ❖ Weak Compliance with GMP (Good Manufacturing Procedure) Norms: <ul style="list-style-type: none"> ➤ Many units still operate without registration under revised GMP (Schedule M). ➤ Irregular inspections and lenient certification sustain unsafe practices.



	<ul style="list-style-type: none"> ❖ Regulatory Fragmentation: <ul style="list-style-type: none"> ➤ Oversight is divided between CDSCO and state drug controllers. ➤ Poor coordination, limited manpower, and weak labs lead to enforcement gaps. ❖ Unreliable Testing Systems: <ul style="list-style-type: none"> ➤ State lab inconsistencies created confusion about contamination results. ➤ Lack of uniform testing standards undermines credibility. ❖ Irrational Prescriptions: Despite WHO and ICMR advisories, cough syrups are routinely prescribed to children under five. ❖ Weak Deterrence: Low conviction rates in previous cases encourage repeat violations.
Consequences and Wider Implications	<ul style="list-style-type: none"> ❖ Humanitarian Crisis: Nationwide grief and fear among parents; trust deficit in domestic drugs. ❖ Legal & Human Rights Violation: Breach of Article 21 - Right to Safe Medicines; NHRC intervened in the case. ❖ Global Reputation Damage: India's image as "Pharmacy of the World" is under strain after the Gambia & Uzbekistan incidents. ❖ Economic Impact: Potential export bans, lawsuits, and loss of pharma credibility, hurting a sector that contributes ~2% to GDP. ❖ Accountability Concerns: Doctors are being blamed while manufacturers & regulators escape scrutiny, causing protests by the Indian Medical Association (IMA).
Systemic Gaps Exposed	<ul style="list-style-type: none"> ❖ Inadequate Regulatory Capacity: 2024 CDSCO inspection found one-third of drug units violating norms. ❖ Weak Legal Framework: Outdated Drugs and Cosmetics Act (1940) with light penalties versus huge profits. ❖ Poor Coordination & Data Sharing: No central database for unsafe drugs or recall alerts. ❖ Weak Pharmacovigilance: Post-market surveillance and adverse drug reaction reporting remain minimal. ❖ Lack of Transparency: Consumers are not informed about violations or contaminated batches.
Way Forward	<ul style="list-style-type: none"> ❖ Strict Enforcement of Revised GMP (Schedule M): No further extensions; non-compliant units must shut down. ❖ Risk-Based & Surprise Inspections: Expand CDSCO's risk-based audits across states like HP and UP. ❖ Modern Labs & Supply-Chain Tracking: Upgrade to AI-based barcode systems and modern toxicology labs.



	<ul style="list-style-type: none">❖ Fast-Track Prosecution: Expedite criminal trials under Section 27A with harsher penalties.❖ Regulate Pharmacies & OTC Drugs: Enforce prescription-only sale of pediatric syrups; penalize violators.❖ Public Reporting Mechanism: Launch a national helpline/app for reporting spurious drugs.❖ Unified National Drug Authority: Merge CDSCO and state powers — build an FDA-style centralized regulator.❖ Adopt Global Best Practices: Align with the WHO's Medical Product Alert System; test all export batches independently.
Conclusion	India's cough syrup deaths expose a failure of enforcement, not law . To preserve its reputation as the pharmacy of the world , India must ensure that public safety and children's lives outweigh commercial gains .



Miscellaneous

Topic 1 - First Overseas Atal Innovation Centre

Syllabus	Governance Government Initiative
Context	Union Education Minister inaugurated India's first overseas Atal Innovation Centre (AIC) at the IIT Delhi-Abu Dhabi campus during his UAE visit.
What is the Overseas Atal Innovation Centre?	<ul style="list-style-type: none"> ❖ Premier innovation hub set up outside India under Atal Innovation Mission (AIM). ❖ Launched: September 2025 at IIT Delhi-Abu Dhabi campus. ❖ Functions: <ul style="list-style-type: none"> ➤ Incubate start-ups, provide mentoring & seed support. ➤ Advanced labs & infrastructure for R&D. ➤ Student exchange, teacher training, and skill-building programmes. ➤ Act as a global bridge for knowledge-sharing and innovation networks.
About Atal Innovation Mission (AIM)	<ul style="list-style-type: none"> ❖ Flagship initiative of the NITI Aayog. ❖ Aim: To nurture a culture of innovation & entrepreneurship in schools, universities, and industries. ❖ Key Components: <ul style="list-style-type: none"> ➤ Atal Tinkering Labs (ATLs): <ul style="list-style-type: none"> ■ Innovation labs in schools (Class 6-12) for robotics, IoT, 3D printing, etc. ■ 10,000+ labs established across India. ➤ Atal Incubation Centres (AICs): <ul style="list-style-type: none"> ■ University/corporate-based incubators. ■ Provide start-ups with mentorship, funding, networking, and infrastructure. ■ 72 AICs operational, supporting 3,500+ start-ups & creating 32,000+ jobs. ➤ Entrepreneurial Ecosystem: <ul style="list-style-type: none"> ■ Focus sectors: HealthTech, AgriTech, FinTech, EdTech, Food Processing, Drone & Space Tech, AR/VR. ■ 1,000+ women-led start-ups supported under AIM.
Significance of Overseas AIC	<ul style="list-style-type: none"> ❖ Global outreach: First time, India's innovation framework expands abroad. ❖ India-UAE partnership: Deepens ties in higher education, technology, and sustainability. ❖ Opportunities for students: Joint projects, start-up incubation, and global exposure. ❖ Boost to start-ups: Provides an international platform for Indian innovators.

**Topic 2 - Nobel Prize in Medicine**

Syllabus	Science & Technology Biotechnology
Context	The 2025 Nobel Prize in Physiology or Medicine has been awarded to Mary E. Brunkow, Fred Ramsdell (USA) , and Shimon Sakaguchi (Japan) for their pioneering discoveries on peripheral immune tolerance .
Key Highlights of the Research	<ul style="list-style-type: none"> ❖ Focus Area: Peripheral Immune System <ul style="list-style-type: none"> ➤ Deals with immune components outside the central nervous system (CNS). ➤ Essential for understanding how the body distinguishes between self and non-self, i.e., what to attack or protect. ➤ They discovered how the immune system is prevented from attacking the body's own healthy tissues (self-tolerance).
Discovery of Regulatory T (Treg) Cells	<ul style="list-style-type: none"> ❖ T-cells are immune defenders, each type marked by specific surface proteins. ❖ In 1995, Shimon Sakaguchi identified a new class - Regulatory T-cells (Tregs). ❖ Function: Suppress excessive immune responses and maintain self-tolerance, preventing the immune system from attacking the host. ❖ This mechanism is termed Peripheral Tolerance.
FOXP3 Gene and Autoimmunity	<ul style="list-style-type: none"> ❖ Mary E. Brunkow and Fred Ramsdell studied "scurfy mice", which suffered from severe autoimmune diseases. ❖ In 2001, they discovered the FOXP3 gene as the cause of autoimmunity in these mice and in the human disease IPEX (Immune dysregulation, Polyendocrinopathy, Enteropathy, X-linked syndrome). ❖ Sakaguchi later proved that FOXP3 controls the development of Treg cells, linking genetics with immune regulation.
Significance of the Discovery	<ul style="list-style-type: none"> ❖ Cancer Therapy: <ul style="list-style-type: none"> ➤ Tumors often exploit Tregs to suppress immune attack. ➤ This discovery paved the way for immunotherapies that modulate T-cell activity to improve cancer treatment outcomes. ❖ Autoimmune & Transplant Medicine: <ul style="list-style-type: none"> ➤ Insights from Treg biology are used to enhance Treg formation, aiming to: <ul style="list-style-type: none"> ■ Treat autoimmune diseases like Type-1 diabetes and lupus. ■ Prevent organ rejection post-transplantation.

**Topic 3 - Nobel Prize in Physics**

Syllabus	Science & Technology Quantum Mechanics
Context	The 2025 Nobel Prize in Physics has been awarded to John Clarke, Michel Devoret, and John Martinis (USA) for demonstrating that quantum mechanical effects can occur at a macroscopic, human-scale level , bridging the gap between microscopic quantum physics and real-world applications.
Background	<ul style="list-style-type: none"> ❖ Core Question: <ul style="list-style-type: none"> ➤ Physicists have long asked - How large can a system be and still exhibit quantum behaviour? ➤ Traditionally, quantum properties were thought to exist only at atomic or sub-atomic scales. ❖ Key Breakthrough: <ul style="list-style-type: none"> ➤ Around 40 years ago, the laureates proved that quantum mechanics can manifest in macroscopic systems - objects large enough to be held in one's hand. ➤ Their work relied on principles like quantum tunnelling and energy quantisation, showing that quantum phenomena extend beyond the microscopic world.
About the Experiment and Research	<ul style="list-style-type: none"> ❖ Quantum Tunnelling: <ul style="list-style-type: none"> ➤ Quantum tunnelling allows particles to pass through barriers that would be impossible to cross under classical physics. ➤ Earlier, such behaviour was limited to the microscopic scale (e.g., electrons, atoms). ➤ The laureates demonstrated quantum tunnelling at a macroscopic level, using innovative superconducting circuits. ❖ Josephson Junction Setup: <ul style="list-style-type: none"> ➤ Their experiment involved an electric circuit with two superconducting components separated by a thin insulating layer - known as a Josephson junction. ➤ This setup showed quantised energy states, meaning the system could absorb or emit only discrete energy levels, as predicted by quantum theory.
Significance of the Discovery	<ul style="list-style-type: none"> ❖ Technological Impact: <ul style="list-style-type: none"> ➤ Paved the foundation for: <ul style="list-style-type: none"> ■ Quantum Computers - enabling qubits with macroscopic quantum coherence. ■ Quantum Sensors - highly sensitive detectors for magnetic or gravitational fields.

	<ul style="list-style-type: none"> ■ Next-Generation Transistors – enhancing efficiency and speed in microchips. ❖ Conceptual Leap: <ul style="list-style-type: none"> ➤ Demonstrated that quantum laws apply even at human-observable scales, reshaping our understanding of the physical world.
What is Quantum Mechanics?	<ul style="list-style-type: none"> ❖ Explains the behaviour of extremely small particles such as electrons and photons. ❖ Based on the principle of wave-particle duality, entities act as both particles and waves. ❖ Governs phenomena like quantum tunnelling, superposition, and entanglement, forming the foundation of modern physics.

Topic 4 - Nobel Prize in Chemistry	
Syllabus	Science & Technology Nanomaterials
Context	The Royal Swedish Academy of Sciences has awarded the 2025 Nobel Prize in Chemistry to Susumu Kitagawa, Richard Robson, and Omar Yaghi for their pioneering development of Metal–Organic Frameworks (MOFs) - a new class of porous materials revolutionising energy, environment, and healthcare applications.
About Metal–Organic Frameworks (MOFs)	<ul style="list-style-type: none"> ❖ Concept: <ul style="list-style-type: none"> ➤ MOFs are molecular architectures that pack vast internal spaces into microscopic structures - similar to Hermione Granger’s handbag, capable of holding immense volumes in tiny spaces. ➤ One gram of MOF can have an internal surface area equivalent to that of a football field due to its extreme porosity. ❖ Structure: <ul style="list-style-type: none"> ➤ Built from metal ions linked by organic (carbon-based) molecules, forming a 3D porous framework. ➤ These pores act as molecular rooms that can trap, separate, transform, or transport gases and molecules. ➤ Often compared to “molecular hotels”, where each door (pore) is designed to allow only specific guests (molecules).
Scientific Innovation and Flexibility	<ul style="list-style-type: none"> ❖ Customisable Design: <ul style="list-style-type: none"> ➤ By altering the metal and organic linkers, scientists can control the size, shape, and function of MOF pores. ➤ This allows MOFs to capture, store, or catalyse specific substances selectively.

	<ul style="list-style-type: none"> ❖ Key Discovery: The laureates' work led to the creation of tens of thousands of MOF types, forming a major branch of modern material chemistry.
Applications of MOFs	<ul style="list-style-type: none"> ❖ Water Harvesting: It can extract water vapour from desert air at night and release potable water during the day's heat. ❖ Environmental Cleanup: <ul style="list-style-type: none"> ➤ Remove toxic PFAS chemicals and decompose crude oil or antibiotics in polluted water. ➤ Help in carbon capture and air purification. ❖ Industrial Use: Enable hydrogen storage, rare-earth metal extraction from wastewater, and CO₂ sequestration for sustainable industries. ❖ Healthcare & Biotechnology: Used for targeted drug delivery, detoxification of harmful gases, and enzyme encapsulation to degrade environmental pollutants.

Topic 5 - Nobel Prize in Literature	
Syllabus	Awards
Context	Hungarian author László Krasznahorkai has been awarded the Nobel Prize in Literature 2025 by the Swedish Academy for his profound and visionary literary contributions.
About the Winner - László Krasznahorkai	<ul style="list-style-type: none"> ❖ Born: 1954, Gyula, Hungary. ❖ Style: Dense, philosophical, and apocalyptic prose blending absurdism, existentialism, and realism. ❖ Influences: Kafka, Thomas Bernhard, and the Central European modernist tradition. ❖ Themes: Chaos, faith, human decay, and resilience amid moral collapse.
Major Works	<ul style="list-style-type: none"> ❖ Satantango (1985) – Surreal portrayal of a decaying village (post-communist decay and existential despair); adapted into a 7-hour film. ❖ The Melancholy of Resistance (1989) – Explores authoritarianism and moral collapse. ❖ War and War (1999) – Reflects on violence, history, and transcendence. ❖ Herscht 07769 (2018) – Depicts German social unrest with depth and empathy.

**Topic 6 - Nobel Peace Prize**

Syllabus	Awards
Context	The Nobel Peace Prize 2025 has been awarded to María Corina Machado, Venezuela's opposition leader, for her relentless and peaceful fight to restore democracy and civil liberties under an authoritarian regime.
About the Winner – María Corina Machado	<ul style="list-style-type: none"> ❖ Known as: “Iron Lady of Venezuela.” ❖ Role: Leader of Venezuela’s democratic opposition movement. ❖ Recognition: For civilian courage and steadfast advocacy for peaceful political transition.
Major Contributions	<ul style="list-style-type: none"> ❖ Champion of Democracy: Led non-violent protests for free elections, rule of law, and civil rights for over two decades. ❖ Founder of Súmate (2002): A citizen-led watchdog ensuring electoral transparency and civic participation. ❖ Advocacy for Ballots over Bullets: Promoted peaceful, constitutional means for democratic reform. ❖ Voice of Civil Resistance: Mobilized citizens during the 2024 rigged elections, preserving evidence of electoral fraud. ❖ Humanitarian Work: Founded the Atenea Foundation (1992) to support street children and promote education.

Topic 7 - Economics Nobel Prize

Syllabus	Economy Awards
Context	The 2025 Nobel Prize in Economic Sciences has been awarded to Joel Mokyr, Philippe Aghion, and Peter Howitt for their groundbreaking research on innovation-driven economic growth .
Winners and Their Contributions	<ul style="list-style-type: none"> ❖ Joel Mokyr (Half Share): (Historical Prerequisites) <ul style="list-style-type: none"> ➤ Awarded for identifying prerequisites for sustained growth through technological progress. ➤ Explained how scientific breakthroughs and practical innovations reinforce each other to sustain long-term growth. ➤ He also stressed the need for a society open to new ideas and change. ❖ Philippe Aghion & Peter Howitt (Joint Half Share): (Theory of Creative Destruction) <ul style="list-style-type: none"> ➤ Honoured for developing the theory of sustained growth through creative destruction.

➤ Showed how innovation drives new products while rendering old ones obsolete - the dual engine of progress and disruption.

Topic 8 - FSSAI Bans Misleading 'ORS' Labels

Syllabus	Governance Health Regulation
Context	FSSAI has barred food companies from using the label "ORS" on sugary beverages that don't meet WHO standards, following a Hyderabad doctor's decade-long campaign against misleading marketing.
FSSAI's New Order	<ul style="list-style-type: none"> ❖ Directive: Prohibits the use of 'Oral Rehydration Salts (ORS)' on products not matching the WHO's prescribed formula. ❖ Revoked Permissions: All previous approvals allowing ORS usage with disclaimers are withdrawn. ❖ Aim: Prevent consumer deception by restricting the ORS tag only to scientifically valid rehydration solutions.
What is ORS?	<ul style="list-style-type: none"> ❖ Scientifically formulated glucose-electrolyte mixture to treat dehydration from diarrhea, vomiting, or heat. ❖ Enables quick rehydration by restoring salts and fluids in the body.
WHO-Recommended Composition (per litre)	<ul style="list-style-type: none"> ❖ Sodium chloride – 2.6 g ❖ Potassium chloride – 1.5 g ❖ Sodium citrate – 2.9 g ❖ Dextrose – 13.5 g ❖ Total Osmolarity: 245 mOsm/L ❖ Ensures optimal absorption through glucose-mediated sodium transport in the intestines.
Key Uses and Benefits	<ul style="list-style-type: none"> ❖ Treatment of dehydration from diseases and heat exposure. ❖ Essential in child healthcare and emergency relief. ❖ Low-cost, home-preparable, and endorsed by WHO-UNICEF.
Background: Doctor's Consumer Campaign	<ul style="list-style-type: none"> ❖ Initiated by Dr. Sivaranjani Santosh, a Hyderabad pediatrician. ❖ Exposed sugar-laden drinks falsely branded as ORS. ❖ Filed a PIL (2022) in the Telangana High Court demanding action against deceptive advertising.
FSSAI and the Food Safety Act, 2006	<ul style="list-style-type: none"> ❖ Established the FSSAI as a single statutory body for food safety regulation. ❖ Ensures scientific, hygienic, and standardized food production and labeling. ❖ Mandates licensing, inspection, recall, and penalties for unsafe or misleading products.

Enforcement & Penalties	<ul style="list-style-type: none"> ❖ Violations invite finest, license suspension, or imprisonment. ❖ Appeals handled by the Food Safety Appellate Tribunal.
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Topic 9 - Exercise Drone Kavach	
Syllabus	Science & Technology Defence
Context	The Indian Army's Spear Corps conducted Exercise Drone Kavach in Eastern Arunachal Pradesh.
About Exercise	<ul style="list-style-type: none"> ❖ Conducted by Spear Corps, under Eastern Command, in the forward areas of Eastern Arunachal Pradesh. ❖ Duration: Four days, with participation from ITBP personnel stationed in the region. ❖ Focused on next-generation drone warfare and validation of state-of-the-art drone technologies.

Topic 10 - Development Push in Manipur	
Syllabus	Governance & Regional Development
Context	Prime Minister Narendra Modi inaugurated and laid the foundation for development projects worth over ₹1,200 crore in Imphal, Manipur.
Development Push in the North-East	<ul style="list-style-type: none"> ❖ Mizoram Railway Connectivity: <ul style="list-style-type: none"> ➤ 51.38 km Bairabi-Sairang railway line connects Aizawl to the Indian Railways network. ➤ Aizawl becomes the fourth Northeastern capital linked to railways after Guwahati, Agartala, and Itanagar. ➤ Projects worth ₹9,000 crore were inaugurated in Aizawl. ❖ Significance: <ul style="list-style-type: none"> ➤ Act East Policy: Enhances trade and people-to-people ties with Myanmar and Bangladesh. ➤ Economic Integration: Facilitates the movement of goods, boosts tourism, and promotes local exports. ➤ National Integration: Reduces isolation, connecting Mizoram to the Indian heartland.

**Topic 11 - WIPO Global Innovation Index (GII) 2025**

Syllabus	Report & Indices
Context	The WIPO GII 2025 ranks India 38th (Score 38.2) globally among 139 economies, maintaining its lead in Central & Southern Asia and demonstrating strong innovation performance relative to its income level.
About GII	<ul style="list-style-type: none"> ❖ Launched by: World Intellectual Property Organization (WIPO) with Portulans Institute. ❖ Nature: Annual benchmarking report (18th edition) covering 139 economies and 100 innovation clusters. ❖ Objective: Measures innovation capacity and outputs; guides policymakers and industry leaders. ❖ Global Top 3 <ul style="list-style-type: none"> ➤ Switzerland ➤ Sweden ➤ United States ➤ China enters the Top 10 for the first time (ranking 10th). ❖ India: 48 in 2020 → 38/139 in 2025. <ul style="list-style-type: none"> ➤ Ranks 1st in the Central and Southern Asia region. ➤ Ranks 1st among the Lower Middle-Income Economies for the fourth consecutive year. ➤ Innovation Clusters: India hosts four innovation clusters in the World's Top 100: Bengaluru (21st), Delhi (26th), Mumbai (46th), and Chennai (new entry).

GII Framework

Category	Indicators Included
Innovation Inputs	1. Institutions (India - 58) 2. Human Capital & Research (≈0.7% of GDP) 3. Infrastructure (India - 61) 4. Market Sophistication 5. Business Sophistication (India - 64)
Innovation Outputs	1. Knowledge & Technology Outputs (India - Rank 22, ICT services exports - Global leader - Rank 1). 2. Creative Outputs
Total Indicators	80+ (e.g., R&D spending, patent filings, mobile app creation, high-tech exports).

**Topic 12 - Himachal Pradesh Declared Fully Literate**

Syllabus	Social Issues Literacy
Context	Himachal Pradesh has been declared a 'fully literate' state, joining Goa, Ladakh, Mizoram, and Tripura .
Literacy and Full Literacy	<ul style="list-style-type: none"> ❖ Literacy: Ability to read, write, and compute with comprehension, including digital and financial skills. ❖ Fully Literate State: Achieves ≥95% literacy among adults (15+), per August 2023 Ministry of Education guidelines. ❖ Programme Alignment: Supports the National Education Policy 2020 and the UN Sustainable Development Goal on literacy.
ULLAS Programme	<ul style="list-style-type: none"> ❖ Full Form: Understanding Lifelong Learning for All in Society. ❖ Launch: 2022 by the Ministry of Education. ❖ Target Group: Adults aged 15+ who missed formal schooling. ❖ Objective: Impart foundational literacy, numeracy, digital, and financial skills. ❖ Delivery Mode: Mobile app-based or offline via community volunteers.
Literacy Trends in India	<ul style="list-style-type: none"> ❖ 2011 Census: Literacy for age 7+ defined as ability to read/write with understanding; male 80.9%, female 64.6%, adult literacy 69.3%. ❖ Periodic Labour Force Survey (PLFS) 2023-24: National literacy 77.5%; Mizoram 98.2%, Goa 93.6%, Tripura 93.7%, Himachal 88.8%. ❖ Remaining Gap: 22.3% of adults are still illiterate; highest in Bihar (33.1%), Andhra Pradesh (31.5%), Madhya Pradesh (28.9%).

Your Notes


Our Programs

Courses designed according to new RPSC Pattern

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Connect
Civils RAS


Offline + Online
Live from classroom
Weekly Test series
Daily DPP discussion
Prelims test and Que bank
Current affairs
12-14 Months duration



RIPA Max

Connect
Civils RAS


Complete Mains Course
Mentorship + Video Lectures + Notes
22 Mains Test + Discussion
Answer writing Sessions
22 Prelims test and Que bank
Current affairs
One stop solution for mains



RIPA Advance

Connect
Civils RAS


Mentorship + Mains Notes
22 Mains Test + Discussion
Answer writing Sessions
Current affairs
22 Prelims test and que bank
Updated content



RIPA Light

Connect
Civils RAS


Complete updated Mains Notes
22 Mains Test and Solutions
Answer writing sessions
Current + Detailed feedback
22 Prelims test and que bank
Updated content



Integrated Test Series

Connect
Civils RAS

22 Mains Tests and Solutions
Discussion & Detailed Feedback
Answer writing sessions
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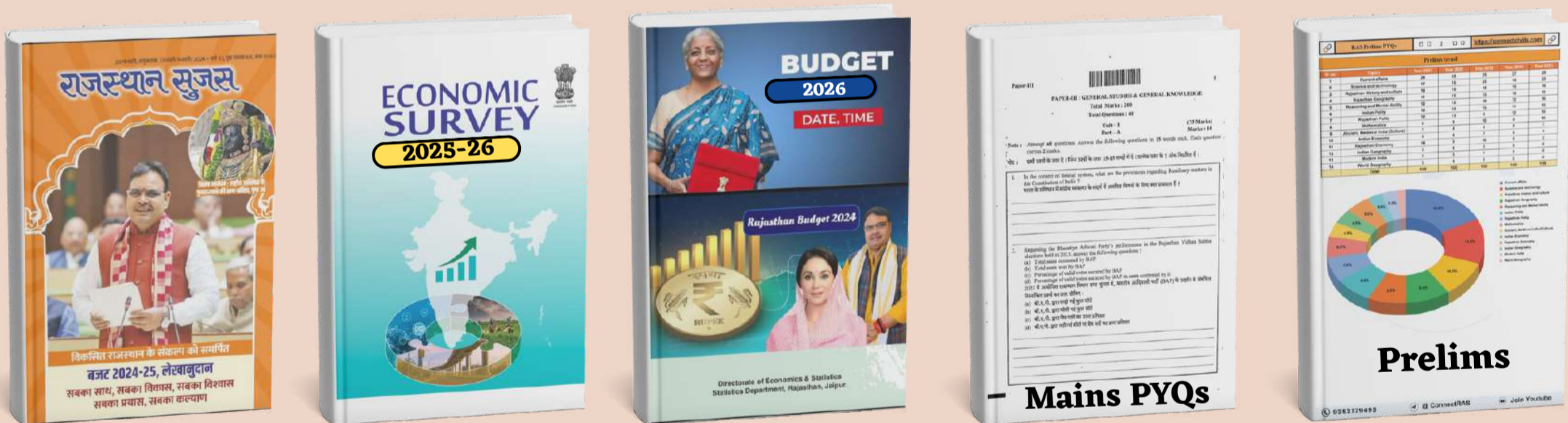
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