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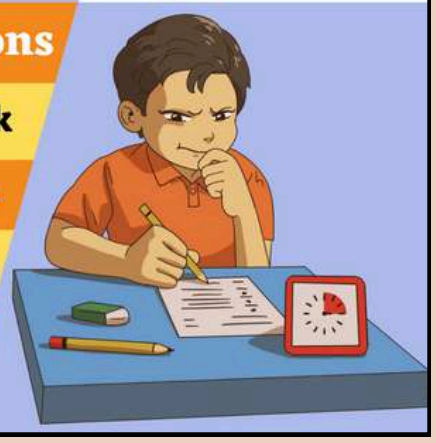

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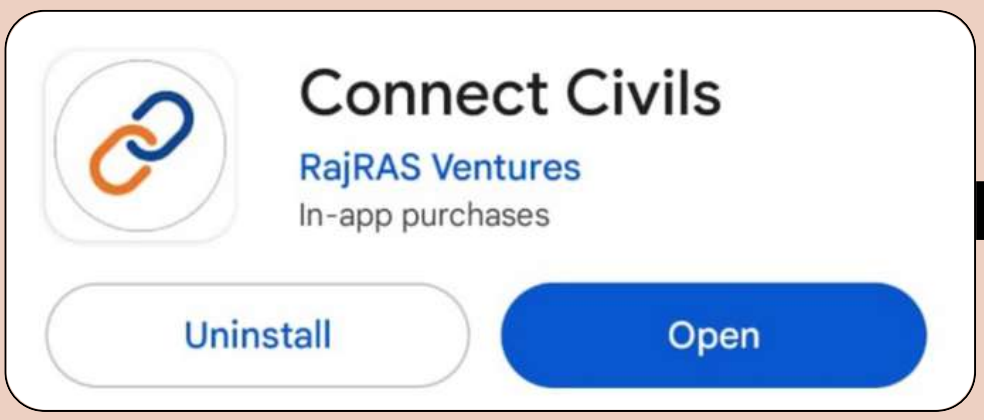

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Polity

Topic 1 - Execution Petitions	
Syllabus	Polity and Constitution | Judiciary
Context	The Supreme Court has expressed deep concern over massive delays in enforcing court decrees, noting that over **8.82 lakh execution petitions** remain pending across India - reflecting a serious crisis in justice delivery.
What are Execution Petitions?	❖ **Execution Petitions** are formal applications filed by the winning party (**decree-holder**) in a lawsuit to the executing court, requesting it to enforce or implement the judgment or order (**decree**) passed in their favour. It is the crucial final stage that gives practical effect to a judicial decision. ❖ Used when the losing party (judgment-debtor) **fails to comply** voluntarily. ❖ Due to procedural and systemic delays, enforcement often takes **years after the verdict.** ❖ **Legal Basis:** Governed by **Order XXI** of the Civil Procedure Code (CPC), 1908.
Extent of the Problem	❖ **8.82 lakh** execution petitions pending in district courts (as per NJDG data). ❖ Average civil case duration: **4.9 years**, plus **4 years** for execution → nearly **a decade for justice.** ❖ **47.2%** of petitions pending since before 2020 - showing chronic stagnation.
Major Reasons for Delay	❖ **Lawyer unavailability:** 38.9% of cases were delayed. ❖ **Court stays:** 17% of delays. ❖ **Document issues:** 12% pending due to incomplete records. ❖ **Procedural hurdles:** The Losing party can raise repeated objections under the Civil Procedure Code (CPC), extending hearings and adjournments.
State-Wise Pendency	❖ **Bombay High Court:** 3.4 lakh pending petitions - highest in India. ❖ **Madras High Court:** 86,000 pending. ❖ **Kerala High Court:** 83,000 pending. ❖ Reflects **judicial capacity and infrastructure gaps** in states like Maharashtra and Tamil Nadu.
Supreme Court's Interventions	❖ **2021:** Then CJI S.A. Bobde directed all trial courts to dispose of execution petitions **within 6 months.** ❖ **2025:** Justices JB Pardiwala & Pankaj Mithal launched a **nationwide review** of execution delays. ❖ High Courts instructed to **collect data** and ensure clearance within six months. ❖ Despite progress (3.38 lakh disposed), **8.82 lakh are still pending.**

Topic 2 - Appointment of the Chief Justice of India (CJI)	
Syllabus	Judiciary | Supreme Court | Appointments
Context	CJI Bhushan Ramakant Gavai has recommended **Justice Surya Kant** as the **53rd Chief Justice of India**, following the established constitutional and convention-based process of succession.
About the Chief Justice of India	❖ **Head of the Judiciary:** Leads the Supreme Court and oversees judicial administration and case allocation → Master of the Roster. ❖ **Constitutional Provision:** Governed by **Article 124(2)** - the **President** appoints judges of the Supreme Court after consultation with judges of the SC and HCs as deemed necessary. ❖ **Memorandum of Procedure (MoP)**: Guides appointment, transfer, and elevation of judges; not legally binding but followed in practice.
Process of Appointment	❖ **Initiation:** Law Minister seeks the outgoing CJI's recommendation at least one month before retirement. ❖ **Seniority Principle:** By established convention, the **senior-most judge** of the SC is appointed as CJI. Seniority is determined by the **length of service** in the Supreme Court, not age. ❖ **Recommendation Route:** The outgoing CJI's proposal → Law Minister → Prime Minister → President. ❖ **Presidential Appointment:** The **President formally appoints** the new CJI via a warrant of appointment. ❖ **Oath Ceremony:** The appointed CJI takes the **oath** before the **President of India**.
Convention & Collegium Role	❖ The **Collegium System** (CJI + 4 senior-most judges) manages judicial appointments but reinforces the **seniority convention** for CJI succession. ❖ Ensures **judicial independence**, **institutional stability**, and **continuity of leadership**.
Key Principles Underlying the Appointment	❖ **Seniority & Merit:** Promotes fairness and avoids political influence. ❖ **Consultative Convention:** Though uncodified, it maintains trust between the judiciary and the executive. ❖ **Executive Approval:** The President acts on the **Council of Ministers' advice**, preserving constitutional balance.

Judicial Evolution: The Collegium System

While the appointment of the **CJI** is primarily based on **seniority**, the appointment of **other Supreme Court Judges** is done through the **Collegium System**, which evolved from the **"Three Judges Cases"**:

Case Name	Principle Established
First Judges Case (1981) – S.P. Gupta v. Union of India	Ruled that "consultation" with the CJI did **not** mean "concurrence." Gave **Executive primacy** in appointments.
Second Judges Case (1993) – Supreme Court Advocates-on-Record Association v. Union of India	Overruled 1981 verdict. Held that "consultation" **means "concurrence."** Established the **Collegium System** (CJI + two senior-most Judges). Gave **Judiciary primacy**.
Third Judges Case (1998) – Re Presidential Reference	Expanded collegium to **CJI + 4 senior-most SC judges**; emphasized **plurality of opinion** and transparency. The CJI's opinion is binding on the President. The executive can **seek reconsideration once**, but must accept the final recommendation.
Fourth Judges Case (2015) – Supreme Court Advocates-on-Record v. Union of India	Struck down **National Judicial Appointments Commission (NJAC)** as unconstitutional; upheld **Collegium System** citing **judicial independence**

Topic 3 - The Contours of Constitutional Morality	
Syllabus	Ethics | Polity & Governance
Context	The idea of **constitutional morality** is once again at the centre of public debate, as recent judicial and political developments test the harmony between **constitutional ethics** and **popular morality** in Indian democracy.
What Is It?	❖ **Meaning:** Constitutional morality is the **ethical framework** guiding all constitutional institutions to act with **fairness, restraint, and fidelity** to constitutional values, not personal or political interests. ❖ **Essence:** It upholds the **spirit of the Constitution** - ensuring power is exercised within moral and legal limits.
Core Features	❖ **Rule of Law:** All actions must stay within constitutional and legal boundaries. ❖ **Institutional Propriety:** Protects the independence and dignity of institutions. ❖ **Respect for Dissent:** Promotes tolerance and dialogue as democratic virtues. ❖ **Accountability:** Power must be morally and legally defensible. ❖ **Spirit over Text:** Focus on ethical intent, not mere legal compliance.
Evolution of the Concept	❖ **Ancient Roots:** Indian philosophy linked law with morality through Dharma and Aram (virtue). ❖ **Western Origin:** George Grote (1846) coined “constitutional morality” to mean reverence for constitutional forms.

	❖ **Ambedkar's Vision:** True democracy needs **moral discipline**, not just legal structure - "Democracy in India is only a top-dressing on an undemocratic soil." ❖ **Judicial Recognition:** Revived in SC judgments - Manoj Narula (2014), Sabarimala (2018), Navtej Johar (2018).
Dimensions of Constitutional Morality	❖ **Institutional:** Respects the roles and boundaries of the legislature, executive, and judiciary. ❖ **Judicial:** Judges interpret laws with **moral reasoning** aligned to the constitutional ethos. ➢ In 2025, **CJI Gavai** reaffirmed its role as the **judiciary's moral compass**, especially in electoral and dissent-related judgments (E.g., electoral bonds, sedition, and minority rights). ➢ Judiciary is both **guardian and moral conscience** of the Constitution (**CJI Gavai).** ❖ **Legislative:** Encourages deliberation, inclusivity, and accountability. ❖ **Citizen:** Promotes civic morality - respect for diversity and rational debate.
Challenges	❖ **Majoritarian Populism:** Popular morality undermines constitutional ethics. ❖ **Erosion of Conventions:** Political disregard weakens institutional balance. ❖ **Judicial Overreach:** Risk of overstepping the separation of powers. ❖ **Public Ignorance:** Low civic constitutional awareness. ❖ **Partisan Bureaucracy:** Loyalty shifts from the Constitution to politics.
Way Forward	❖ **Civic Constitutionalism:** Promote constitutional literacy and awareness. Constitutional morality is not a natural sentiment - it has to be cultivated." (**Dr. B.R. Ambedkar**) ❖ **Ethical Leadership:** Institutionalize integrity in governance. ❖ **Institutional Oversight:** Regular ethical reviews for constitutional offices. ❖ **Judicial Prudence:** Exercise moral guidance without legislative encroachment. ❖ **Citizen Engagement:** Encourage participatory democracy rooted in empathy and equality.
Conclusion	Constitutional morality is the **soul of Indian democracy**, transforming the Constitution from a legal document into a **moral covenant**. As Ambedkar envisioned, democracy thrives not by law alone but by **moral discipline** - when law and conscience unite, justice and equality truly prevail.

Topic 4 - Strengthening Legal Aid Mechanism in India	
Syllabus	Polity | Judiciary
Context	Legal aid ensures **equal access to justice** for all, especially the poor and marginalized. Strengthening India's legal aid ecosystem is vital for reducing pendency, empowering citizens, and fulfilling the **constitutional mandate of Article 39A**.
About Legal Aid Mechanism in India	❖ **What it is:** Provision of free legal assistance to individuals who cannot afford legal representation. ❖ **Established through: Legal Services Authorities Act, 1987** (implemented in 1995). ❖ **Core Objective:** To ensure that no person is denied justice due to **economic or social disadvantage**. ❖ **Coverage:** Free representation, legal advice, mediation, digital aid (Tele-Law, Nyaya Bandhu), and legal literacy programs.
The Necessity for Strong Legal Aid	❖ **Access Gaps:** Approximately 70% of the rural population suffers from poor legal infrastructure. ❖ **Case Backlog:** The country faces 4.5 crore pending cases; mediation alone could reduce this backlog by **30–35%**. ❖ **Social Inclusion:** Legal aid is vital for social inclusion, ensuring representation for **women, SC/ST, and minorities**, with 80% of undertrials coming from poor communities. ❖ **Awareness Gap:** Only **1 in 5** eligible citizens is aware of their right to free legal aid. (NALSA, 2024). ❖ **Constitutional Obligation:** Article **39A mandates free legal aid** as a cornerstone of social justice.
Major Initiatives Taken So Far	❖ **NALSA–DLSA Network:** A four-tier system that has managed over **8 lakh cases** in three years. ❖ **Tele-Law:** Has provided **45 lakh consultations** since 2017, accessible at **1.3 lakh Common Service Centres (CSCs)**. ❖ **Nyaya Bandhu:** Connects low-income litigants with over 11,000 pro bono advocates. ❖ **Mediation Act 2023:** Aims to resolve approximately **70%** of civil and family disputes outside formal courts through structured mediation. ❖ **Judgment Translation:** More than 80,000 judgments have been translated into **18 Indian languages**. ❖ **Legal Literacy Drives:** NALSA has conducted over 2,500 awareness camps nationally.

Challenges in Legal Aid Delivery	❖ **Quality of Service:** Only **20%** of legal aid lawyers receive formal training, impacting service quality. ❖ **Infrastructural Deficiencies: 40%** of district courts lack essential legal aid clinics or mediation centers. ❖ **Digital Divide:** Limited internet access persists in 25% of rural areas, hindering digital aid expansion. ❖ **Protracted Justice:** The average case takes **6+ years** in lower courts, contributing to high pendency.
Way Forward	❖ **Funding and Infrastructure:** Increase NALSA/DLSA funding by **25%** and establish more district-level clinics. ❖ **Quality Control:** Make **mandatory training and certification** for all legal aid lawyers a requirement. ❖ **Digital Expansion:** Scale up the use of **AI tools**, e-filing, and mobile legal helpdesks. ❖ **Awareness:** Integrate **legal literacy** into the NEP 2020 curriculum and conduct awareness campaigns at the Panchayat level. ❖ **Partnerships:** Forge collaborations with universities, bar councils, and private firms to broaden pro bono support.
Conclusion	A strong legal aid system is essential for the **ease of justice** and true social equity. By focusing on technology, awareness, and institutional reforms, India can ensure that **justice becomes a right for all**, thereby supporting the vision of **Viksit Bharat 2047**.

Topic 5 - Tribunal Reforms Act, 2021	
Syllabus	Polity | Judiciary
Context	The Supreme Court invalidated major provisions of the **Tribunal Reforms Act, 2021**, citing violation of judicial independence and separation of powers, and directed the government to establish a **National Tribunal Commission**.
Overview of the Tribunal Reforms Act, 2021	❖ **Enacted:** August 2021. ❖ **Purpose:** To restructure existing tribunals, standardize operations, appointments, and service conditions across various tribunals. ❖ **Aims:** ➢ Reduce case backlogs by shifting them to High Courts. ➢ Ensure uniformity in service conditions across all tribunals. ➢ Increase the executive's role for better administrative oversight.
Key Features of the Act	❖ **Abolition:** Abolished several specialised tribunals (Intellectual Property Appellate Board - IPAB, Film Certification Appellate Tribunal - FCAT, and the Airport Tribunal) and transferred their pending appeals to **High Courts**. ❖ **Appointment Process:** Centralized via a Search-cum-Selection Committee, headed by the Chief Justice of India (CJI)/nominee. ❖ **Tenure:** A fixed tenure of **4 years** for both Chairpersons and Members. ❖ **Minimum Age Requirement:** The minimum age for appointment is **50 years**. ❖ **Executive Control:** The Central Government is responsible for determining the **salaries, allowances, and service rules**.
Supreme Court Judgment (2025)	❖ The SC held that several provisions were **unconstitutional** as they undermined the independence of the judiciary. ❖ **Provisions Struck Down:** ➢ 4-year tenure limit. ➢ Minimum age of 50 for appointment. ➢ Requirement to send a panel of only two names per vacancy. ➢ Linking service conditions to those of civil servants.
Reasoning of the SC	❖ **Basic Structure:** Tribunal independence is an integral part of the Constitution's **basic structure**. ❖ **Legislative Override:** The Act was deemed a legislative override, attempting to re-enact provisions previously struck down in the **MBA IV & V rulings**. ❖ **Conflict of Interest:** Executive control over appointments and service conditions is problematic since the Union government is often the **largest litigant** before tribunals. ❖ **Constitutional Safeguards:** Tenure, age limits, and the selection process must adhere to established constitutional safeguards.

SC Directions & Future Course	❖ The government must constitute a National **Tribunal Commission (NTC)** within four months. ❖ **Interim Guidelines:** Until a new law is enacted, the **MBA IV & V guidelines** on tenure, eligibility, and selection must be followed. ❖ **Protection:** Existing appointments made before the Act's enforcement will remain valid.
Arguments in Favour of the Act	❖ Simplifies and **streamlines** tribunal structure. ❖ Brings **uniformity** in appointments & service rules. ❖ Faster appointment process with central coordination. ❖ Age 50+ ensures experienced members. ❖ Short tenures allow for performance review.
Arguments Against the Act	❖ Weakens **judicial independence** through short tenure and executive dominance. ❖ Re-introduces struck-down provisions previously. ❖ Age bar excludes talented younger experts/advocates. ❖ Executive control over salaries and service rules compromises neutrality. ❖ Abolishing tribunals overburdens High Courts and reduces technical expertise.
Way Forward	❖ Draft a **fresh law** that aligns with the SC's MBA judgments and constitutional principles. ❖ Establish a strong and impartial **National Tribunal Commission** for appointments and oversight. ❖ Retain and strengthen specialised tribunals that require domain expertise. ❖ Ensure a **transparent, merit-based** selection process. ❖ Improve infrastructure, staffing, and digital systems for efficient justice delivery.
Conclusion	The Supreme Court's judgment firmly reasserts the principle that tribunals must be independent of executive influence. By invalidating the unconstitutional provisions, the Court aims to restore the constitutional balance and facilitate the creation of a stronger, more impartial, and efficient tribunal system.

Topic 6 - Lokpal of India	
Syllabus	Indian Polity | Constitutional Bodies
Context	Recent data showing a sharp fall in complaints and controversies over its functioning raises concerns about its credibility and effectiveness.
About Lokpal	❖ **Established under:** Lokpal and Lokayuktas Act, 2013 (**statutory** body). ❖ **Purpose:** To inquire into corruption allegations against public functionaries, including the PM, Ministers, MPs, and officials. ❖ **Origin:** Born out of the 2011 "India Against Corruption" movement led by Anna Hazare. ❖ **Formation:** First Lokpal constituted in March 2019 - a milestone in India's anti-corruption framework. ❖ **New Motto Adopted** (June 2025): "Empower Citizens, Expose Corruption" replaces "Ma Gridhah Kasyasvid Dhanam".
Composition & Appointment	❖ **Chairperson (2025):** Justice A.M. Khanwilkar (Former SC Judge) ❖ **Members:** 8 total (4 judicial + 4 non-judicial - belong to SC/ST/OBC/Minorities/Women). ❖ **Appointing Authority:** President of India ❖ **Selection Committee:** Prime Minister (Chairperson), Speaker of the Lok Sabha, LoP in Lok Sabha, CJI, and an eminent jurist. ❖ **Tenure:** 5 **years** or until the age of 70 **years**, whichever is earlier.
Powers & Functions	❖ **Inquiry & Investigation:** Independent probe into corruption under the Prevention of Corruption Act, 1988. ❖ **Jurisdiction:** Covers PM (specific safeguards, require approval by **2/3rd majority** of full bench), Ministers, MPs, Group A–B officials, and government-funded entities. ❖ **Supervision of CBI:** Can direct and monitor investigations. ❖ **Prosecution Powers:** Can sanction prosecutions, order asset attachments, and recommend suspensions. ❖ **Civil Court Powers:** Can summon witnesses, demand documents, and issue orders.
Performance Overview	❖ **Complaints:** 6,955 total; only 289 led to inquiries. ❖ **Prosecutions:** Just 7 cases reached the trial stage. ❖ **Recent Decline:** Complaints dropped from 2,469 (2022–23) to 233 (2025). ❖ **Transparency Gap:** No annual reports published since 2021–22. ❖ **Reform Note:** A Prosecution Wing (2025) was finally established to improve accountability.

Major Challenges	❖ **Public Disillusionment:** Sharp fall in complaints shows eroding trust. ❖ **Institutional Weakness: Vacancies and delayed appointments** hinder its effectiveness and credibility. ❖ **Infrastructure Dependence:** Reliance on **CVC and CBI** for probes limits **independent functioning**. ❖ **Rigid Procedures:** Complex complaint format discourages whistleblowers. ❖ **Opacity:** Lack of published outcomes undermines transparency. ❖ **Ethical Concerns:** BMW car purchase controversy dents moral image.
Way Forward	❖ **Digital Transparency:** Launch a public dashboard for complaint tracking. ❖ **Ethical Discipline:** Adopt austerity and integrity in institutional conduct. ❖ **Institutional Strength:** Strengthen the inquiry and prosecution wings. ❖ **Citizen Participation:** Simplify processes and raise public awareness. ❖ **Legal Reform:** Make annual reporting and parliamentary review mandatory.
Conclusion	Lokpal was envisioned as the moral guardian of Indian democracy, ensuring accountability at the highest levels. Revitalizing Lokpal demands transparency, moral restraint, and active citizen engagement to make it a pillar of truly clean governance.

Topic 7 - Reforming Election Nomination Process	
Syllabus	Polity & Governance | Electoral Reforms
Context	Frequent disqualifications on minor procedural grounds have reignited debates on **reforming India's nomination process**. Experts argue that the system, rooted in the **RPA 1951**, grants excessive discretion to Returning Officers (ROs).
Legal Framework	❖ The **nomination process** is governed by **Section 33–36** of the **Representation of the People Act, 1951,** and **Conduct of Elections Rules 1961**. ❖ **Key Requirements:** Candidates must submit **Form 2A/2B**, affidavits detailing assets and criminal records (as per Supreme Court mandates), a security deposit, and proposer details. ❖ **Section 36 – RO's power** to reject forms for "defects of substantial character," a term that is not clearly defined. ❖ **Article 329(b)** – Bars judicial intervention during elections → challenges possible **only after polls**, making pre-poll rejections irreversible.
Key Issues with India's Election Nomination Process	❖ **Arbitrary Discretion: RPA, 1951, Section 36** uses the vague term "defects of a **substantial character**," giving the Returning Officer excessive power to reject nominations → often perceived as politically motivated. ❖ **Focus on Technicalities:** Candidates are often disqualified for minor

	procedural errors (e.g., missing signatures - Bihar RJD case, delayed "no-dues" certificates - Birbhum case, blank affidavit columns) while **false declarations** only lead to post-election petitions. ❖ **Affidavit Burden:** Supreme Court mandates (e.g., Resurgence India, 2013) for detailed affidavits on assets and criminal records increase compliance complexity and errors. ❖ **Procedural Traps:** Rigid steps like the **Oath Trap**, **Treasury Trap**, and **Certificate Trap** cause disqualification based on bureaucratic mistakes, not substantive eligibility. ❖ **No Pre-poll Appeal: Article 329(b)** bars **pre-election** judicial review. Arbitrary rejections can only be challenged after the election via an expensive, delayed **Election Petition**. ❖ **Access Inequality:** The complex procedure disproportionately disadvantages marginalized, independent, and first-time candidates lacking legal/digital support.
Democratic Concerns	❖ The nomination process has become a **"bureaucratic test, not a democratic right."** ❖ Minor administrative errors are used to restrict voter choice and eliminate candidates (democratically regressive). ❖ This undermines democratic transparency and fair access to the electoral process.
Global Best Practices	❖ **United Kingdom:** Returning Officers (ROs) assist in fixing errors before deadlines. ❖ **Canada:** A 48-hour window is provided for corrections following scrutiny. ❖ **Germany:** Officials must issue a written notice and grant time to resolve issues. ❖ **Australia:** Early submissions are encouraged, and an appeals process is available. ❖ Global models consistently position election officers as **facilitators** rather than **gatekeepers**, prioritizing the timely rectification of errors.
Way Forward	❖ **Guarantee a Correction Window:** Mandate ROs to provide written notice of defects and allow candidates **48 hours for rectification** of technical errors. ❖ **Codify Defect Classification:** Clearly distinguish and establish protocols for: ➢ Technical/Procedural Errors → Allow correction. ➢ Authenticity Issues (e.g., proposer verification) → Verify, not immediately reject. ➢ Statutory Disqualifications → Direct rejection based on law. ❖ **Mandate Reasoned Orders:** All rejection orders must be written, citing **specific legal grounds and evidence** for increased transparency. ❖ **Digital-by-Default System:**

	➢ Create a **Unified ECI Portal** for submission of all documents (affidavits, deposits). ➢ Establish a **Public Dashboard** for real-time status updates to reduce discretion.
Conclusion	Reforming the nomination process is critical for a robust democracy. By introducing **transparency, accountability, and digital efficiency**, India can ensure its elections reflect **voter choice over procedural rigidity**, strengthening the foundations of participatory democracy.

Topic 8 - Model Code of Conduct (MCC)

Syllabus	Polity & Governance | Electoral Reforms
Context	The MCC has again come under scrutiny after alleged violations in the Bihar elections, raising concerns over misuse of welfare schemes and the need to strengthen electoral fairness.
Model Code of Conduct (MCC)	❖ **What it is:** A set of **ECI guidelines** for free, fair, and ethical elections, regulating **parties, candidates, and government officials**. ❖ MCC applies to **central and state governments**, including **digital platforms.** ❖ **Purpose:** Maintain a level playing field and prevent misuse of government machinery. ❖ Comes into force from the **date of election announcement** and remains till **completion of the process.** ❖ **Legal Status:** The MCC is **not a statutory law**, but its authority derives from **Article 324** (ECI's power to supervise and conduct elections).
Evolution of MCC	❖ **1960:** Origin in the Kerala Assembly elections as a voluntary code. ❖ **1962:** Adopted nationally during the Lok Sabha elections. ❖ **1979–1991:** Gradual institutionalisation; stricter enforcement post-1991. ❖ **2013:** Revised after **Subramaniam Balaji judgment** - added rules for manifestos and freebies.

	➢ Violations are penalized using provisions of **Indian Penal Code (IPC)**, **Code of Criminal Procedure (CrPC)**, and **Representation of the People Act, 1951 (RPA)**.
Key Provisions	❖ **General Conduct:** No hate speech, caste/religious appeals, or personal attacks. ❖ **Party in Power:** Bars new schemes, grants, appointments or announcements that may influence voters. ➢ **Govt Machinery:** No use of the govt. vehicles, media, personnel or guest houses for campaigning. ❖ **Campaign Restrictions:** Ban on bribing, intimidation, and liquor distribution (48-hour silence period). ❖ **Manifestos:** Must show financial feasibility and avoid distortionary freebies (populist promises). ❖ **Meetings/Processions:** Require prior police permission to maintain order.
Why MCC Needs Strengthening	❖ **Safeguards election integrity:** Prevents misuse of state power. ❖ **Stops pre-poll freebies:** Ensures schemes aren't timed to influence voters. ➢ Example: Bihar's Mahila Rojgar Yojana (2025) criticised for pre-poll cash transfers. ❖ **Promotes fair competition:** Focus on governance, not state-funded inducements. ❖ **Builds voter trust:** Strengthens credibility of outcomes.
Challenges	❖ **Not legally binding:** Limits ECI's punitive powers. (Recommendation by **Dinesh Goswami Committee** (1990) and Law Commission of India - **255 th** Report) ❖ **Scheme circumvention:** Governments rebrand/accelerate schemes despite MCC. ➢ Example: Telangana subsidy relabelling (2023). ❖ **Slow judicial process:** MCC cases drag on beyond election cycles. ❖ **Digital manipulation:** AI propaganda, deepfakes bypass traditional oversight. ❖ **Political resistance:** Ruling parties oppose stricter controls, citing governance needs.
Way Forward	❖ **Statutory backing:** Enact an MCC law linked to the RPA 1951 for enforceable penalties. ❖ **Fast-track tribunals:** Real-time disposal of MCC complaints during elections. ❖ **Tech-enabled monitoring:** Use AI tools, social media analytics, cVIGIL, and "AI-Monitor." ❖ **Transparency norms:** Public disclosure of complaints + EC action within 48 hours. ❖ **Ethics institutionalisation:** Mandatory training on electoral integrity for party workers.

Conclusion	A stronger MCC - with legal teeth, digital oversight, and ethical political practices - is crucial to safeguard India's electoral integrity and ensure truly free and fair democratic competition.

Topic 9 - CAG's Plan for Two New Cadres

Syllabus	Polity & Governance | Institutes
Context	The CAG has approved the creation of two specialised audit cadres within the Indian Audit and Accounts Department (IA&AD) - **Central Revenue Audit (CRA)** and **Central Expenditure Audit (CEA)** - to strengthen centralised auditing, improve domain expertise, and enhance fiscal accountability from January 2026. Indian Audit & Accounts Department.
New Cadres Announced	❖ **Central Revenue Audit (CRA):** ➢ Audits the Central Government **receipts** and **revenues.** ➢ Enhances expertise in **tax, customs,** and **revenue collection audits.** ❖ **Central Expenditure Audit (CEA):** ➢ Auditing Central Government **expenditure, ministries, and departments**. ➢ Focuses on budgetary control, financial management, and program execution. ❖ **Cadre Size:** Consolidates 4,000+ audit professionals with all-India transfer liability. ❖ **Reason:** Reduces fragmentation caused by multiple State Civil Audit offices.
Why the Reform Was Needed	❖ The current audit structure is fragmented across states. ❖ Limited domain specialisation in revenue vs expenditure audits. ❖ Need for uniform, centralised, and expert-driven auditing. ❖ Strengthens fiscal oversight and accountability.
CAG of India	❖ **Constitutional Authority:** Articles **148–151**. ❖ **Role:** "Guardian of the Public Purse"; audits Union, State, and government-funded bodies. ❖ **Appointment:** By the President; tenure **6 years or until age 65** (whichever is earlier). ❖ **Removal:** Same grounds and in the same manner as a **Judge of the Supreme Court** - by a special majority of Parliament. **Constitutional Provisions** ❖ **Art. 148:** Establishes CAG.

	❖ **Art. 149:** Duties & powers of auditor. ❖ **Art. 150:** Form of government accounts. ❖ **Art. 151:** Lays audit report submission process. **Key Functions of CAG** ❖ Audits all receipts and expenditure of the Union and State Governments, including the Consolidated Fund, Contingency Fund, and Public Account. ❖ Audits government companies/corporations. ❖ Submits reports to the President/Governor → examined by PAC. ❖ Acts as an adviser to legislative committees. **Major Reports Submitted by CAG** ❖ **Appropriation Accounts Report** – expenditure vs sanctioned amount. ❖ **Finance Accounts Report** – annual receipts & disbursements. ❖ **Public Undertakings Report** – performance of government companies.

Topic 10 - The Threat of White-Collar Terrorism: A New Face of Extremism	
Syllabus	Security | Terrorism
Context	The Faridabad terror module has revealed the rise of **white-collar terrorism**, where educated professionals use skills and social respectability to plan sophisticated extremist activities.
What Defines White-Collar Terrorism?	This form of terrorism is characterized by: ❖ **Educated Radicalism:** Terror activities are planned by highly **educated professionals** (e.g., doctors, engineers, academics). ❖ **Ideological Roots:** Radicalisation is primarily driven by deep **ideological conviction** or 'moral' anger, rather than socio-economic hardship or poverty. ❖ **Tactical Advantage:** Individuals use their **technical expertise**, respected social status.
Characteristics	❖ **Societal Camouflage:** Extremists maintain a seamless presence, blending into respected professional and urban settings. ❖ **Moral Justification:** Violence is frequently framed as an ethical or spiritual duty, promoting a sense of moral righteousness. ❖ **Technological Sophistication:** Perpetrators use advanced engineering and IT skills in attack planning and execution. ❖ **Digital Recruitment:** Radicalisation frequently occurs online via encrypted platforms and digital echo chambers.
The Core Problem	The shift towards this type of extremism raises critical concerns:

	❖ A growing number of **urban, educated radicals** are joining terror networks. ❖ Radicalisation is driven by **ideological alienation**, not deprivation. ❖ Online **echo chambers** accelerate the normalisation of violent ideologies. ❖ This form of extremism appears across diverse ideologies (religious, nationalist, separatist).
Implications for Society and Security	The consequences of this trend are far-reaching: ❖ **Erosion of Trust** in elite professions. ❖ Increased **technological sophistication** of terror operations. ❖ **Difficult Detection** due to clean backgrounds. ❖ Strengthening of **international terror networks** via global mobility. ❖ **Moral Polarisation:** It fuels the **glorification of violence** and increases moral polarisation.
Strategies for Countering White-Collar Terrorism	A multi-faceted approach is essential to address both the intent and capability of these extremists: ❖ **Preventative Education:** Implement **ethics-based education** to foster civic empathy. ❖ Promote **community vigilance** for the early identification of radicalisation signs. ❖ **De-radicalisation:** Offer effective **de-radicalisation therapy** and robust reintegration support. ❖ **Digital Monitoring:** Utilize **AI-driven digital monitoring** tools, ensuring strict privacy safeguards are in place. ❖ Enforce **strict professional oversight** and ethical guidelines within high-trust professions. ❖ **Civic Engagement:** Establish **platforms for civic dialogue** to combat ideological isolation and alienation.
Conclusion	White-collar terrorism is characterized by **conviction and high capability**. Countering it requires focusing on ethics, technology, and inclusive civic spaces to dismantle both the intent and the ideology.

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Topic 1 - India–Bhutan	
Syllabus	International Relations |Neighbouring Countries
Context	India–Bhutan relations are built on **trust, cultural affinity, and strategic partnership**, reinforced during the PM's visit to Thimphu for the former King's 70th birthday. The ties reflect **civilisational depth and geopolitical importance** in the Himalayan region.
About India–Bhutan Relations	❖ **Historic Base:** 1949 Treaty of Friendship; updated in **2007** to reflect Bhutan's sovereign decision-making. ❖ **Shared Values:** Strong cultural, religious (Buddhist), and civilisational bonds. ❖ **Geostrategic Role:** Bhutan acts as a **Himalayan buffer,** ensuring India's northern security. ❖ **Economic Link:** India is Bhutan's **largest trade partner**, buying 90% of Bhutan's exports (mainly hydropower). ❖ **Diplomatic Stability:** Bhutan remains India's most reliable neighbour under **Neighbourhood First**.
Key Areas of Cooperation	❖ **Hydropower:** Major projects like Chukha, Tala, and Mangdechhu generate **over 2,100 MW**, powering Bhutan's economy and supplying India. The **Punatsangchhu-II (1,020 MW)** project was inaugurated in 2025. ❖ **Security:** Features strong defence coordination, notably **Operation All Clear (2003)**, which successfully removed insurgent bases. ❖ **Connectivity:** Development of railway links, including Kokrajhar–Gelephu and Banarhat–Samtse, is currently underway. ❖ **Digital Integration:** Seamless cross-border payments enabled by the integration of RuPay, BHIM UPI, and QR codes. ❖ **Space & Technology:** Cooperation includes the joint India–Bhutan satellite launch (2022) and the establishment of joint ground stations. ❖ **Youth & Development:** India provides grants/loans for youth skill programmes under the **Gyalsung National Service** initiative. ❖ **Energy Future:** The **Renewable Energy Roundtable 2024** focused on collaboration in **solar, hydrogen, and private hydropower**.
Major Indian Commitments	❖ India has committed **₹10,000 crore** to support Bhutan's 13th Five-Year Plan. ❖ Cultural ties are strengthened through the exchange of Buddha relics and heritage restoration efforts.

Way Forward	1. **Economic Diversification:** Expanding Bhutan's economy through support for **tech, tourism, agriculture, and education**. 2. **Green Energy Corridors:** Building joint infrastructure for **solar, hydrogen, and carbon-market integration**. 3. **Accelerated Connectivity:** Expediting **rail, fibre-optic, and power-grid** projects. 4. **Future-Ready Collaboration:** Strengthening ties in **youth development, education, AI, and start-ups**. 5. **Regional Stability:** Maintaining joint security vigilance, particularly in the **Doklam sector**.
Conclusion	India–Bhutan partnership embodies **trust, mutual respect, and shared values**. As both nations advance towards a **green and digital future**, the relationship must evolve from hydropower-centric to **knowledge-driven cooperation,** ensuring long-term regional harmony.

Topic 2 - India–Spain Relations

Syllabus	International Relations | Bilateral Relations
Context	Spanish PM **Pedro Sánchez** visits **Vadodara, Gujarat**, with PM **Narendra Modi** to inaugurate the **C295 aircraft Final Assembly Line (FAL)** for the Indian Air Force.
Historical Ties	❖ Diplomatic relations were established in **1956**. ❖ Built on **shared democratic values**, **global peace**, and **multiculturalism**. ❖ Strengthened through **high-level visits** and cultural cooperation over decades.
Bilateral Trade Snapshot (2023)	❖ **Total Trade:** USD **8.25 billion** (**India's Exports:** USD **6.33 billion** + **Imports:** USD **1.92 billion**) ❖ **Major Exports:** Mineral fuels, machinery, apparel, marine & chemical products. ❖ **Major Imports:** Engineering goods, defense tech, ceramics, renewable components.
Investment Relations	❖ **Spanish FDI in India:** ➢ USD **3.94 billion (2000–2023)** – 16th largest investor. ➢ 280+ Spanish firms in **metallurgy, renewable energy, automotive, and infrastructure**. ➢ Key states: Maharashtra, Tamil Nadu, Gujarat, Karnataka. ❖ **Indian FDI in Spain:** ➢ USD **900 million** – 80 Indian firms in **IT, pharma, logistics, chemicals**. ➢ India is among the **top 30 global investors** in Spain.

	❖ **Frameworks:** ➢ **Joint Commission on Economic Cooperation (JCEC)** – set up in 1972; latest meeting (2023). ➢ **India–Spain CEOs Forum** – launched in 2015; fosters corporate partnerships.
Other Areas of Co-operation	**Strategic and Defense Cooperation** ❖ **Defense:** Spain supports India's **Atmanirbhar Bharat** through **C295 aircraft**, submarine, and naval technology collaborations. ❖ **Counter-Terrorism:** Joint intelligence sharing against global terror networks. ❖ **Cybersecurity & Maritime Security:** Growing cooperation in emerging domains. **Sustainability and Climate Partnership** ❖ Shared commitment under the **Paris Agreement**. ❖ Spain's strength in **renewable energy** aligns with India's **green transition goals**. ❖ Active collaboration under the **International Solar Alliance (ISA)**. **Multilateral Engagement** ❖ **UN:** Joint work on peacekeeping and SDGs. ❖ **G20:** Cooperation on global economic stability and climate finance. ❖ **ISA:** Spain supports India's solar energy initiative.
Indian Diaspora in Spain	❖ Around **55,000 Indians (2023)** reside mainly in **Madrid, Barcelona**. ❖ Active in **hospitality, IT, healthcare, and retail** sectors. ❖ Serve as a bridge for cultural and business exchange.
Conclusion	India–Spain relations have evolved from trade to technology and defense partnership, reflecting growing mutual trust. The **C295 aircraft project** symbolizes a new era of **strategic collaboration**, paving the way for deeper engagement in energy, innovation, and global governance.

Topic 3 - India–U.S. 10-Year Defence Framework	
Syllabus	International Relations | Defence Ties
Context	India and the U.S. have signed a **10-year "Framework for the India-U.S. Major Defence Partnership"**, marking a decisive step toward long-term military, industrial, and strategic collaboration, with a strong focus on the Indo-Pacific.
Background of India–U.S. Defence Ties	❖ **Evolution:** Partnership began with the **2005 Defence Framework Agreement**, renewed in **2015**, laying the foundations for exercises, maritime security, and defence trade. ❖ **Foundational Agreements:** ➢ **LEMOA (2016):** Reciprocal logistics access. ➢ **COMCASA (2018):** Secure communications. ➢ **BECA (2020):** Geospatial intelligence sharing. ➢ **SOSA (2024):** Supply chain security cooperation. ❖ The **2025 Framework** institutionalises cooperation for the next decade - focusing on joint R&D, co-development, transfer of defence technologies under **INDUS-X** and Defence Technology and Trade Initiative **(DTTI)**, and regional security coordination.
Key Highlights of the 10-Year Framework	❖ **Policy Roadmap:** Provides a unified direction for sustained collaboration in military, industrial, and technological fields. ❖ **Technology & Co-production:** Promotes joint development of advanced defence systems under **'Make in India, Make for the World'**. ❖ **Enhanced Intelligence Sharing:** Focus on cyber, maritime, and hybrid threat coordination. ❖ **Expanded Joint Exercises:** Includes **Yudh Abhyas, Malabar, Tiger Triumph,** and new trilateral drills. ❖ **Regional Security:** Reinforces shared Indo-Pacific vision - a **free, open, and rules-based maritime order**.
Strategic Significance	❖ **Indo-Pacific Focus:** Counters China's assertive posture through deeper strategic alignment. ❖ **Defence Manufacturing Boost:** U.S. firms encouraged to co-produce in India under the **iCET** (Initiative on Critical and Emerging Technologies) **framework**. ➢ Access to cutting-edge U.S. military technology → Crucial for India's push towards **indigenous defence manufacturing (Atmanirbhar Bharat)**. ❖ **Supply Chain Diversification:** Reduces over-reliance on a single defence import source. ❖ **Resilient Ties Amid Trade Friction:** Defence cooperation remains insulated despite tariff tensions.

Indo-Pacific and Strategic Convergence	❖ Strengthens **Quad cooperation** (India, U.S., Japan, Australia). ❖ Advances in **integrated deterrence** and **freedom of navigation** principles. ❖ Positions India as a **net security provider** and a key partner in regional stability.
Conclusion	The new 10-year defence framework cements India–U.S. defence relations into a mature strategic partnership. By deepening technology sharing, co-production, and regional security coordination, it strengthens India's role in the Indo-Pacific and enhances both nations' capacity to uphold a free and secure regional order.

Topic 4 - Major Non-NATO Ally (MNNA)

Syllabus	International Relations | Defence Ties
Context	The U.S. has recently designated **Saudi Arabia as a Major Non-NATO Ally (MNNA)**, signaling a significant escalation in defence cooperation, particularly following the recent meeting between President Trump and Crown Prince Mohammed bin Salman (MBS).
What is MNNA?	❖ MNNA is a **special U.S. strategic status** established in the **1980s** to broaden America's global alliance network beyond the North Atlantic Treaty Organization (NATO). ❖ **Key Characteristics:** ➢ It offers significant military, financial, and technological advantages. ➢ Crucially, it **does not** include the mutual security guarantees (Article 5) inherent in a full NATO treaty. ❖ **Aim** ➢ To deepen defence and strategic coordination with key partners. ➢ To provide recipient nations with **easier access** to advanced U.S. weapons, training, and joint security frameworks. ❖ Current MNNA Countries: **20 nations** (including **Pakistan**).
Benefits of MNNA Status	❖ **Priority Access:** To Excess Defence Articles (surplus U.S. military equipment). ❖ **Logistics:** The ability to host **U.S. War Reserve Stockpiles**. ❖ **Technology:** Eligibility for joint defence Research & Development (R&D) and testing. ❖ **Cooperation:** Access to specialized training agreements and U.S. Department of Defense (DoD) contracts abroad. ❖ **Funding:** Access to funding for counter-terrorism efforts and advanced security technologies.
India's Unique Status: Major Defence Partner (MDP)	❖ India is **NOT** an MNNA. ❖ India is classified as a **Major Defence Partner (MDP)** since 2016 - a unique category providing access to **high-end U.S. defence technologies** and enhanced **defense trade cooperation.**

	❖ **Comparison with Major Non-NATO Ally (MNNA):** ➢ **MNNA:** A specific, established statutory designation with concrete, pre-defined benefits. ➢ **MDP:** A **unique, bespoke status** created for India to facilitate technology co-development and co-production through mechanisms like the **Defence Technology and Trade Initiative (DTTI)** and **INDUS-X**. ❖ **Rationale:** India prefers the MDP status. It enhances military capabilities while aligning with its commitment to **strategic autonomy** and **non-alignment**, avoiding the "alliance baggage" or potential obligations associated with the MNNA designation.

Topic 5 - India–ASEAN Summit 2025

Syllabus	International Relations | International Organizations
Context	The **22nd ASEAN–India Summit** was held virtually from **Kuala Lumpur, Malaysia** (the ASEAN Chair for 2025). PM Modi reaffirmed India's commitment to deepen cooperation in **maritime security, digital inclusion, and resilient supply chains**, while declaring **2026 as the "ASEAN–India Year of Maritime Cooperation."**
Background of India–ASEAN Relations	❖ **Formal Engagement:** Began in 1992 (Sectoral Dialogue Partner), upgraded to Full Dialogue Partnership in 1996. ❖ **Act East Policy (2014):** Evolved from the Look East Policy, focusing on economic, cultural & strategic ties. ❖ **Comprehensive Strategic Partnership (2022):** Strengthened cooperation in defence, connectivity & trade. ❖ **FTA (2009, 2015):** ASEAN–India Trade in Goods Agreement (AITIGA) & Services & Investment Agreement boosted economic linkages. ASEAN is India's **4th largest trading partner** (≈11% of global trade). ❖ **Cultural Links:** Shared heritage via Buddhism, ancient maritime trade & civilisational exchange.
Key Areas of Cooperation	❖ **Maritime Security:** Joint patrols, domain awareness & naval exercises in the Indo-Pacific. Rules-based Indo-Pacific order (SAGAR vision). ❖ **Economic Integration:** Ongoing review of AITIGA to enhance trade & reduce non-tariff barriers. ❖ **Digital & Green Economy:** Collaboration in Digital Public Infrastructure (DPI), renewable energy & AI-driven innovation. ❖ **Connectivity Projects: India–Myanmar–Thailand Trilateral Highway (IMT-TH)** and **Kaladan Multi-Modal Transit Transport Project (KMMTTP)** to enhance regional integration. ❖ **People-to-People Ties:** Educational, cultural & tourism exchanges through AINTT & ICCR initiatives.

	❖ **Defence Exports:** Strengthening ties through defense procurement (e.g., BrahMos missile deal with the Philippines).
Key Outcomes and Declarations	❖ **ASEAN–India Plan of Action (2026–2030):** Focus on trade, food security, innovation & capacity building. ❖ **ASEAN–India Fund (₹500 crore):** Supports projects in connectivity, agriculture & skill development. ❖ **Maritime Focus (2026): "ASEAN–India Year of Maritime Cooperation"** → to promote the blue economy & oceanic cooperation. ❖ **Cultural Diplomacy**: India will host the **East Asia Summit Maritime Heritage Festival at Lothal, Gujarat**, to highlight shared civilizational links. ❖ India welcomed **Timor-Leste** as the **11th Member** of ASEAN.
Significance for India	❖ **Indo-Pacific:** Acts as a **democratic counterbalance**, promoting a **multipolar Asia** amid US–China rivalry. ❖ **Economic Gateway:** Enhances access to **Global Supply Chains**, reducing dependence on China → **economic diversification** amid China+1 strategy. ❖ **Northeast Development: Connectivity projects** link India's Northeast to ASEAN markets, creating **economic corridors**. ❖ **Global South Leadership:** Positions **India and ASEAN** as partners in **global stability and South–South cooperation**.
Challenges Ahead	❖ **Trade Imbalance:** ASEAN imports exceed India's exports (trade deficit- **US$44 billion** in 2023); limited value-added trade. ❖ **AITIGA Review Delays:** Procedural and protectionist barriers slow progress. ❖ **China Factor:** ASEAN's dependence on China limits India's strategic leverage. ❖ **Connectivity Gaps: Slow progress** on **IMT Highway** and **Kaladan projects** hampers regional integration. ❖ **Divergent Priorities:** ASEAN's **neutral stance** vs. India's **Quad alignment** creates strategic hesitation.
Way Forward	❖ **Accelerate AITIGA Review:** Strengthen services & digital trade integration. ❖ **Boost Maritime Cooperation:** Operationalise naval drills & blue economy projects. ❖ **Enhance Connectivity:** Link Northeast India to Southeast Asia via multi-modal corridors. ❖ **Institutional Dialogues:** Promote Track 1.5 & 2 exchanges for strategic trust. ❖ **Balanced Diplomacy:** Uphold ASEAN centrality while aligning Indo-Pacific goals with inclusivity.
Conclusion	The India–ASEAN partnership blends **civilisational heritage with strategic modernity.** As both move toward a shared Indo-Pacific vision, the **2026 Maritime Cooperation Year** can anchor a **resilient, equitable, and future-ready regional order.**

Quote for GS/Essay	"ASEAN is central to India's vision of a free, open, and inclusive Indo-Pacific." – PM Modi, Oct 2025.

Topic 6 - BRICS Pay	
Syllabus	International Relations | Economy
Context	The BRICS nations (Brazil, Russia, India, China, and South Africa) are actively developing **BRICS Pay**, a sophisticated **cross-border payment and messaging system**.
About BRICS Pay	❖ **Core Function:** To facilitate transactions among member countries in their respective **local currencies**. ❖ **Primary Goal:** To serve as a robust **alternative to the US-dominated SWIFT system** for cross-border payments and significantly **reduce dependence on the US dollar**. This is intended to promote a more **multipolar and sanctions-resistant** global financial framework. ❖ **Background and Evolution** ➢ **Origin:** Western sanctions on Russia post-2014 exposed financial vulnerability, inspiring this concept. ➢ It was formalized at the **Kazan Summit in 2024**, with a prototype shown in Moscow in October 2024. ➢ **Early Milestones:** ■ **Fortaleza Summit (2014):** Led to the establishment of the **New Development Bank (NDB)** and the **Contingent Reserve Arrangement (CRA)**, setting the stage for financial cooperation. ■ **Post-2017 Focus:** Increased emphasis on **local currency trade** and operationalizing **currency swap mechanisms**.
Mechanism and Technological Backbone	❖ **Developed by: BRICS Payment Task Force (BPTF)**, with a focus on ensuring **interoperability** among the member countries' existing national payment systems. ❖ **Existing Infrastructure Support:** ➢ **India:** UPI (Unified Payments Interface) ➢ **China:** CIPS (Cross-border Interbank Payment System) ➢ **Russia:** SPFS (System for Transfer of Financial Messages) ➢ **Brazil:** Pix ➢ **South Africa:** SAMOS (South African Multiple Option Settlement). ❖ Together, these form the **technological backbone** of BRICS Pay. ❖ **Digital Infrastructure**: Uses **blockchain and secure APIs** for real-time settlements.

Significance of BRICS Pay	❖ **De-dollarisation:** Challenges US dollar dominance in global trade and finance, protecting member economies from US monetary and exchange rate instability. ❖ **Financial Sovereignty & Sanctions Resistance:** Allows BRICS nations to bypass Western-controlled systems (like SWIFT) and protect members (e.g., Russia, Iran) from unilateral sanctions or geopolitical blockades. ❖ **Boost to Local Currencies:** Promotes trade settlements in BRICS national currencies, reducing exchange rate risks and transaction costs. ❖ **Strengthens BRICS Cohesion:** Deepens financial integration and economic cooperation among member states (South–South cooperation). ❖ **Alternative Financial System:** Supports the creation of a more inclusive, multipolar global financial architecture, catering to emerging economies. ❖ **Digital Integration:** Promotes interoperability with national systems like UPI, SPFS, and CIPS.
Implications for India	❖ **Reducing Transaction Risk:** Provides a **safe channel for trade** with countries facing sanctions (like Russia and Iran), ensuring the continuation of crucial imports (e.g., discounted oil). ❖ **Rupee Push:** Accelerates Rupee-based trade settlement and its internationalisation, reducing dependency on third-party currencies and exchange rate risk. ❖ **Digital Leader:** India's UPI showcases a successful, low-cost digital payment model, boosting India's role in global financial technology and governance. ❖ **Geopolitical Balance:** Allows India to join a **multipolar economic block** while maintaining strategic autonomy and engagement with the Western financial system.
Challenges	❖ **Technical Interoperability:** Aligning diverse national systems (UPI, CIPS, SPFS) with different standards, security protocols, and regulatory frameworks is complex. ❖ **Geopolitical Distrust:** Political tensions (e.g., India-China border issues) and concerns over the dominance of one national system (CIPS/Yuan) can slow cooperation. ❖ **Currency Coordination:** Divergent monetary policies and the **absence of a unified BRICS currency** create complexities in managing **liquidity and exchange rate volatility**. ❖ **External Pressure:** Potential for economic retaliation or secondary sanctions from Western powers on countries fully adopting the system.

Topic 7 - India and the New Nuclear Order	
Syllabus	International Relations | Nuclear Policy
Context	The current global environment, marked by major powers revisiting nuclear testing and weakening arms control, prompts a serious discussion on whether **India should reconsider its voluntary nuclear test moratorium**.
Shifting Global Nuclear Order	The post-Cold War consensus on nuclear restraint is dissolving, forcing a re-evaluation of global security: ❖ **Erosion of Restraint:** Nations are actively modernizing their nuclear stockpiles. ❖ **Major Power Activities:** ➢ **Russia:** Withdrawn from key arms control treaties ((e.g., New START) and increased activity at **Arctic test sites**. ➢ **China:** Rapidly expanding its nuclear arsenal, building new missile silos, and conducting tests at **Lop Nur.** ➢ **U.S.:** Publicly considering renewed nuclear testing due to skepticism about the long-term reliability of simulated testing. ❖ **CTBT's Weakness:** The Comprehensive Nuclear-Test-Ban Treaty remains unratified by major powers, significantly undermining global trust. ❖ Technological advancements (e.g., hypersonics, cyber threats).
India's Nuclear Legacy	India has established itself as a responsible nuclear power through a defined policy: ❖ **1974 – Pokhran-I ("Smiling Buddha"):** Conducted its first test, initially claimed for peaceful purposes. ❖ **1998 – Pokhran-II (Operation Shakti):** Successfully validated both fission and fusion devices. ❖ **Post-1998 Policy:** Instituted a **voluntary moratorium on testing** and adopted a **No First Use (NFU)** policy under the overarching doctrine of **Credible Minimum Deterrence (CMD)**. ❖ **Result:** This maturity led to international recognition, the end of sanctions, civil nuclear cooperation deals, and legitimacy as a responsible global power. ❖ Not a signatory to **NPT (Non-Proliferation Treaty) or CTBT (Comprehensive Nuclear-Test-Ban Treaty).**
Why Reconsider Testing Now	Several factors suggest the need to revisit the no-testing policy: ❖ **Eroding Restraint:** The non-testing norm is being eroded by the actions of major powers. ❖ **Technological Gap:** India's last validated warhead designs are now 27 years old, raising concerns about reliability. ❖ **Deterrence Reliability:** Subcritical and simulation tests alone cannot fully guarantee the reliability and yield of nuclear weapons. ❖ **Regional Security:** China's rapid buildup and Pakistan's diversification (e.g., tactical

	nukes) threaten regional deterrence stability. ❖ **Strategic Signalling:** A test would reaffirm India's nuclear deterrence and underscore its independent foreign policy posture (Strategic Autonomy). ❖ **New Systems Demand:** Ensuring performance, miniaturization, and reliability is crucial for new platforms like Agni-V, SLBMs (Submarine-Launched Ballistic Missiles), and MIRVs (Multiple Independently Targetable Reentry Vehicles).
Challenges of Resuming Tests	❖ **Diplomatic and Political Fallout:** Risk of global backlash, potential economic sanctions, and international isolation. ❖ **Erosion of Moral Image:** Damaging India's reputation as a responsible and restrained nuclear state. ❖ **Economic Repercussions:** Poses a risk to attracting foreign investments and jeopardizes crucial technological cooperation with other nations. ❖ **Regional Instability (Arms Race):** Could trigger a reciprocal nuclear or military response from China and Pakistan, fueling regional instability. ❖ **Environmental Concerns:** The potential for radiation leaks and ecological damage at test sites.
Way Forward	India must navigate this complex landscape by balancing preparedness with restraint: ❖ **Strategic Review:** Establish a **National Commission** to conduct a comprehensive assessment of current and future deterrence requirements. ❖ **Enhanced Technology:** Intensify investment in **advanced simulation (supercomputing)**, **materials science**, and **non-explosive validation techniques**. ❖ **Regional Stability:** Actively pursue and maintain stability measures and dialogue with China and Pakistan. ❖ **Diplomatic Preparedness:** Maintain transparency to mitigate diplomatic fallout if testing is required. ❖ **Ethical Compliance:** Any future testing must remain consistent with the foundational principles of **NFU and CMD**, serving only for validation and not for provocation.
Conclusion	While **India's restraint since 1998** signifies great maturity, **strategic complacency** risks eroding its deterrence capability. In this evolving nuclear order, India's future path must **balance moral authority with scientific readiness** to ensure both its security credibility and strategic autonomy.

Topic 8 - First BIMSTEC–India Marine Research Network (BIMReN) Conference	
Syllabus	International Relations | Grouping
Context	The **first BIMReN Conference in Kochi** marked a major step in strengthening regional marine research, blue economy collaboration, and Bay of Bengal ocean governance under the BIMSTEC framework.
What is it?	❖ A **biennial BIMSTEC regional platform** to promote joint marine research, sustainable fisheries, and blue economy cooperation. ❖ **Aim:** Boost scientific cooperation, ensure sustainable use of Bay of Bengal resources, and align with India's **Neighbourhood First, Act East, Indo-Pacific, and Maritime Heads for Active Security and Growth for All in the Region (MAHASAGAR)** strategies.
Key Features	❖ **Origin:** Announced during the 2022 **Colombo BIMSTEC Summit** and officially launched in **2024** by India's Ministry of External Affairs. ❖ **Host (2025):** India hosted the **first conference in Kochi** (Nov 4–6). ❖ **Institutional Network:** Connects 25 institutes & 50+ scientists via grants/fellowships. ❖ **Focus Areas:** Marine health, fisheries sustainability, ocean observation, tech innovation. ❖ **Regional Integration:** Strengthens data sharing, capacity building & maritime governance.
Significance	❖ Enhances India’s leadership in marine science diplomacy. ❖ Supports sustainable ocean governance and promotes regional integration of the blue economy. ❖ Advances the MAHASAGAR vision of holistic maritime growth.

Topic 9 - FATF Expands Asset Recovery Scope	
Syllabus	International Relations | Grouping
Context	FATF has released a major new global guidance expanding asset recovery beyond corruption to include fraud, cybercrime, and money laundering, strengthening international efforts against financial crimes. It makes **depriving criminals of their illegal gains** a primary policy objective.
FATF's "Asset Recovery Guidance and Best Practices"	❖ **What it is:** A **340-page global framework** for tracing, freezing, managing, and returning criminal assets across borders. ❖ **Shift:** Moves **beyond graft** to target a wider spectrum of financial and cyber offences. ❖ **Policy Priority**: FATF urges countries to treat asset recovery as a **policy and operational priority**, not a post-trial formality.
Key New Features	❖ **Broader Scope:** Covers fraud, cybercrime, investment scams, crypto offences, and money laundering. ❖ **Lifecycle Approach:** Tracks every phase - **Identification → tracing → freezing → management → confiscation (asset seizure) → return** of criminal assets (repatriation). ❖ **Non-Conviction Based Confiscation (NCBC):** Requires countries to adopt NCBC mechanisms, enabling asset recovery even without a criminal conviction (e.g., when the accused has fled or died). ❖ **India Cited as Best Practice:** ➢ Directorate of Enforcement (**ED**) cited as a **model agency** for inter-agency coordination and legal innovation under **PMLA, 2002.** ➢ **Fugitive Economic Offenders Act, 2018** (FEOA): Model legal doctrine for fugitive disentitlement. ➢ Examples ■ Agri Gold case: ₹6,000 cr restored. ■ IREO scam: ₹1,800 cr attached. ■ BitConnect crypto fraud: ₹1,646 cr seized. ❖ **Victim-Centric:** Focuses on restitution & victim compensation. ➢ Example: Rose Valley scam recovery highlighted.
FATF	❖ An **intergovernmental** body that sets global standards to combat money laundering, terrorist financing, and other threats to the international financial system. ❖ **Established:** 1989 (G7 initiative, Paris). ❖ **HQ:** Paris, France (hosted by the OECD). ❖ **Members**:

	➢ **38** countries + **2** regional organizations (Gulf Cooperation Council and the European Commission). ➢ India has been a **member since 2010. (**Pakistan is **not** a member). ❖ **Objectives** ➢ Protect global financial systems from criminal misuse. ➢ Ensure stability, transparency, and integrity in international finance. ❖ **Core Functions** ➢ **Global Standards:** FATF Recommendations for AML/CFT compliance. ➢ **Monitoring:** Mutual evaluations of member countries. ➢ **Risk Identification:** Maintains **Grey List** & **Black List** for non-cooperative Jurisdictions. ■ **Black List**: High-risk countries with serious deficiencies (e.g., North Korea). ■ **Grey List**: Countries under increased monitoring (e.g., Myanmar, as of 2025). ➢ **International Cooperation:** Supports cross-border investigations & asset recovery. ➢ **Emerging Threats:** Addresses crypto laundering, cyber fraud, and terror networks. ➢ **Support to UN & G20:** Aligns with global anti-terror and economic stability mandates.

Topic 10 - Doha Political Declaration	
Syllabus	Governance | International Relations
Context	The **Doha Political Declaration**, adopted at the **Second World Summit for Social Development (2025)**, renews global commitment to poverty eradication, decent work, and inclusive growth aligned with the 2030 SDGs.
What is it?	❖ Adopted at the **Second World Summit for Social Development (WSSD 2025)**, held in **Doha, Qatar (Nov 4–6, 2025)**. ❖ **Three Core Pillars**: Reaffirms commitment to **poverty elimination, decent work, social inclusion**, and integration with the **SDGs**. ❖ Hosted by **Qatar in partnership with the UN**, attended by **8,000+ participants** including heads of state, ministers, civil society, and youth groups.
Key Features	❖ **Poverty Eradication:** Labels poverty removal as a moral + developmental necessity. ❖ **Decent Work:** Pushes inclusive, safe, and fair employment opportunities. ❖ **Social Inclusion:** Ensures no group - women, youth, elderly, marginalized - is left behind. ❖ **SDG Integration:** Frames social, economic, and environmental goals as interlinked pillars.

	❖ **Action Framework:** Moves from analysis to **implementable global commitments**. ❖ **Peace Linkage:** Stresses peace as essential for sustainable development. ❖ **Global Cooperation:** Calls for stronger multilateral partnerships + financing. ❖ **Transformative Vision:** Aims for just, resilient, and secure societies.
Copenhagen Declaration (1995) – Background Context	❖ Landmark UN declaration from the **1995 Copenhagen Summit**. ❖ First global commitment placing **people-centered social development** at the core of policy. ❖ **Key Features** ➢ **Integrated Development:** Links economic growth, social justice, and environmental sustainability. ➢ **Human-Centric Approach:** People are placed at the centre of development. ➢ **Peace–Rights Nexus:** Asserts human rights and peace as essential for development. ➢ **Gender Equality:** Calls for women's full participation in social and economic life.

Economy

Topic 1 - Recalibrating Banking Regulations	
Syllabus	Economy | Banking Sector
Context	India aims to grow from a **$3.7 trillion** to a **$7 trillion economy** by 2030-31, requiring stronger **credit flow** and **investment capacity**. Yet, stringent banking regulations restrict lending, making regulatory recalibration essential for sustained growth.
Rising Investment Needs	❖ **Investment requirement:** Achieving this economic target requires approximately **$2.5 trillion** in investment (**34%** investment-to-GDP ratio). ❖ **Funding Gap:** Given fiscal limitations, the **private sector and households** must become the primary drivers of capital formation. ❖ **Weakening Private Investment**: Ratio fell **114% → 56%** (2008-09 to 2023-24).
Challenges in Financial Intermediation	❖ **Shrinking Role of Banks:** ➢ Household savings with banks dropped **50% → 40%**. ➢ Regulatory mandates restrict the operational freedom of banks, thereby increasing credit costs and limiting lending. ❖ **Burden of Mandatory Reserves (The 'Lock-in' Effect):** ➢ **30% of bank deposits are locked** in non-lending, low-yield instruments. ➢ **Statutory Liquidity Ratio (SLR):** Banks currently maintain 26%, which is well above the mandated 18%, largely driven by the Liquidity Coverage Ratio (LCR) requirement. ➢ **Cash Reserve Ratio (CRR):** The 4% CRR, offering zero return, puts a strain on bank liquidity. ➢ New LCR norms for digital deposits are projected to lock an additional **2–2.5%** of deposits.
Do We Need Both SLR & LCR?	❖ Globally, only **LCR** is used; India imposes **both** → excess low-yield parking. ❖ Other economies count **CRR as High Quality Liquid Assets (HQLA)**; India does not → lower profitability. ❖ Basel III allows risk self-assessment, but RBI norms remain rigid.
Liquidity Bottlenecks and MSME Credit Scarcity	❖ **Financing Gap:** While large firms use equity & bond markets; **MSMEs rely solely on banks**. ❖ Persistent credit scarcity for MSMEs due to tight liquidity. ❖ **Priority Sector Lending (PSL) burden >60%** in some banks → mispriced risk & inefficiencies. ❖ PSL must reflect new economic priorities.

Credit Growth, Exchange Rate & Liquidity	❖ **Credit-GDP Disparity:** Credit growth continues to lag nominal GDP growth, impeding capital formation. ❖ **CD Ratio:** The Credit-Deposit (CD) ratio requires revision to achieve a better balance in financial intermediation. ❖ **External Factors:** Rupee defense operations often drain domestic liquidity, while currency overvaluation hampers export competitiveness.
Way Forward	❖ Relax **SLR–LCR overlap** to inject liquidity into the system and reduce lending rates. ❖ Implement predictable, long-term policies to foster confidence and strengthen private investment. ❖ Update **Priority Sector Lending** requirements to target and support contemporary growth sectors. ❖ Align credit expansion with **nominal GDP**. ❖ Deepen bond markets & diversify financing. ❖ **Global Competitiveness:** Ensure digital banking fees are competitive globally.
Conclusion	Achieving India's ambitious goal of a **$7 trillion economy by 2030-31** hinges upon the banking system striking a vital balance among three factors: **prudent regulation**, adequate **liquidity**, and robust **credit flow**. Strategic reforms in financial intermediation are indispensable to meet this long-term growth objective.

Topic 2 - India's Manufacturing: Reimagining the Future (2026-2035 Roadmap)

Syllabus	Economy | Infrastructure
Context	NITI Aayog's **Frontier Tech Hub**, with **CII and Deloitte**, released "Reimagining Manufacturing" - a 10-year roadmap (2026–2035) to position India among the **top 3 global manufacturing hubs**.

Key Highlights of the Report

Feature	Details
Publisher	NITI Aayog's Frontier Tech Hub (in collaboration with CII & Deloitte).
Objective	Drive India's manufacturing growth through **frontier technology adoption**, institutional reforms, and skill enhancement.
Scope	A roadmap until **2035**, covering 13 high-impact sectors grouped into **5 clusters**.
Core sectors	Automotive, Electronics, Textiles, Pharma, Renewable Energy.

Current Status & Ambitions for 2035

Metric	Current Status	Target by 2035
GDP Share (Manufacturing)	15–17% (Lower than China's 25% and South Korea's 27%)	**25%**
Skilled Jobs	-	**100+ million**
Global Export Share	2%	**6.5%**

Potential & Opportunities	❖ **Global Hub Vision:** Frontier tech can elevate India to the **top 3 manufacturing hubs** by 2035. ❖ **Economic Contribution:** Add **$270 billion to GDP by 2035**, potentially reaching **$1 trillion by 2047**. ❖ **Employment:** Generate over **100 million skilled jobs**. ❖ **Exports:** Increase global share from 2% to **6.5%**. ❖ **Innovation:** Use of **AI, robotics, and smart materials** to enhance precision, resilience, and sustainability.
Key Challenges	➢ **Low R&D Spending (<1% of GDP)** limits innovation. ➢ **Fragmented MSME Supply Chains** hinder global integration. ➢ **Skill Deficit:** Lack of expertise in critical areas like automation and AI. ➢ **Infrastructure Gaps:** Weak 5G, logistics, and smart industrial parks. ➢ **Regulatory Hurdles:** Absence of unified data and technology standards.
Ongoing Initiatives	❖ **Technology & R&D:** National Manufacturing Mission (NMM), Make in India, Digital India. ❖ **Incentives:** Production-Linked Incentive (PLI) Schemes for high-tech sectors. ❖ **Infrastructure & Competitiveness:** Gati Shakti, PM MITRA (Mega Integrated Textile Region and Apparel). ❖ **Skilling:** Skill India and AICTE Programs for Industry 4.0 readiness.
Key Recommendations	❖ **Global Frontier Technology Institute (GFTI):** Establish a hub for R&D, testing, and certification. ❖ **Plug & Play Tech Parks:** Develop 20 industrial zones equipped with **5G and digital twin simulation**. ❖ **Tech Access Platforms:** Provide shared access to AI and robotics tools for MSMEs. ❖ **Champion-Based Model:** Large corporations to mentor and nurture MSME innovation clusters. ❖ **Servicification of Manufacturing:** Integrate **AI & IoT** into manufacturing to offer high-value services. ❖ **National Digital Backbone:** Create a **real-time industrial IoT network**.

	❖ **State Tech Missions:** Localized skilling and focus (e.g., Robotics in Tamil Nadu, Green Mobility in Maharashtra).
Conclusion	India is transitioning from a focus on **"Make in India" to "Innovate in India."** By systematically adopting frontier technologies, the country can establish **sustainable, high-value industrial leadership** and realize the vision of becoming a **global manufacturing powerhouse by 2047.**

Topic 3 - Financial Sector	
Syllabus	Economy | Banking & Investment
Context	India's financial sector is witnessing an unprecedented wave of **global investments** as leading players like **Blackstone, Bain Capital, Emirates NBD, Zurich Insurance, etc,** acquire stakes in Indian banks, insurers, and NBFCs.
Evolution of India's Financial Sector	❖ **From Protectionism to Liberalisation:** ➢ Earlier, foreign participation was highly restricted. ➢ RBI and government reforms now allow: ■ **100% FDI** in **insurance** (74% → 100% Budget 2025-26). ■ **Up to 74% in private banks** (with approval). ■ Govt plans to raise FDI cap from 20% to **49%** in public sector banks while retaining 51% ownership. ➢ Example: Fairfax allowed > 40% stake in **CSB Bank** as a strategic revival move. ➢ **FPIs hold 48.39%** in HDFC Bank - India's 2nd largest lender.
Recent Big-Ticket Investments	❖ **Blackstone** – 9.99% in **Federal Bank** (₹6,196 crore). ❖ **Bain Capital** – 18% in **Manappuram Finance** (₹4,385 crore). ❖ **Emirates NBD** – 60% in **RBL Bank** ($3 billion). ❖ **SMBC (Japan)** – 25% in **Yes Bank** ($1.6 billion). ❖ **Zurich Insurance** – 70% in **Kotak General Insurance** ($670 million). ❖ **Abu Dhabi's IHC** – ~$1 billion in **Sammaan Capital (Indiabulls Housing)**. ❖ This marks the largest-ever wave of foreign acquisitions in India's financial history.
Why Global Giants Are Investing	❖ **Strong Economic Fundamentals:** ➢ India's GDP is growing at **6.8% (RBI estimate)**. ➢ Banking sector profit: **$46 billion (2024)**, 31% YoY growth. ➢ Credit expansion led by **retail, housing, and MSMEs**. ❖ **Structural Strengths:** ➢ Low corporate leverage, secured retail lending focus. ➢ 400+ million underbanked citizens = vast potential.

	➢ **Digital backbone:** UPI, Aadhaar, Jan Dhan. ❖ **Global Rebalancing:** ➢ Sluggish Western markets, regulatory tightening in China. ➢ India is seen as **stable, scalable, and politically reliable**.
Regulatory Approach & Market Valuation	❖ RBI follows a **"positive but cautious"** approach - ensuring fit-and-proper foreign owners. ❖ Indian banks remain **undervalued** despite strong balance sheets. ❖ Policy goal: **Capital inflow + regulatory sovereignty** balance.
Post-Crisis Sector Cleanup	❖ **Past Issues:** IL&FS, DHFL collapse, Yes Bank rescue, NBFC liquidity stress. ❖ **Reforms:** ➢ **Insolvency and Bankruptcy Code (IBC)** implementation. ➢ RBI's stricter supervision and bad-loan resolution. ❖ Result: Mid-sized banks/NBFCs are now **stable, investable assets**.
Opportunities & Strategic Benefits	❖ **For Global Investors:** Instant access to **licenses, branch networks, and customers**. ❖ **For India:** ➢ Inflow of **foreign capital, technology, and global risk norms**. ➢ Strengthens India's path toward a **$7 trillion economy by 2030**.
Risks & Concerns	❖ **Financial Sovereignty:** Excessive foreign control may influence strategic decision-making. ❖ **Exposure to Global Shocks:** Capital flight risks amid global rate hikes (as seen post-2008 crisis). ❖ **Competitive Imbalance:** Foreign players may access **cheaper global funds**, disadvantaging local firms. ❖ **Regulatory Gaps:** Need for clarity on **foreign control thresholds & voting rights**.
Way Forward	❖ Maintain **calibrated liberalisation** - openness with safeguards. ❖ Create a **comprehensive FDI framework** for financial ownership. ❖ Strengthen **macroprudential oversight** to mitigate external risks. ❖ Encourage **domestic capital participation** and **financial inclusion**.
Conclusion	India's financial sector is at a pivotal juncture - shifting from **protectionism to global integration**. The influx of global capital reflects **trust in India's economic resilience**, yet sustainable growth demands balancing **openness with financial sovereignty**.

Topic 4 - CPI Housing Index

Syllabus	Economy | Inflation
Context	The Ministry of Statistics and Programme Implementation (MoSPI) has proposed major reforms to the **CPI Housing Index** by including **rural housing data for the first time**.
Background – CPI & Housing Index	❖ **CPI:** India's main measure of **retail inflation**, currently based on the **2012 series**. ❖ **Base Year Update:** To be revised to **2024**, using **2023–24 Household Consumption Expenditure Survey (HCES)** data. ❖ **Current Limitation:** ➢ Housing data is collected **only for urban areas** and **twice a year**. ➢ Weight of housing: **21.67% (CPI - Urban)**, **10.07% (CPI - Combined/All-India)**. ➢ **Criticism:** Inclusion of **employer-provided dwellings** and **HRA-based rent proxies** distorts real market values.
Key Proposed Changes	❖ **Monthly Rent Data Collection:** ➢ Shift from biannual to **monthly** rent data gathering. ➢ **Coverage expanded** to both **rural and urban** sectors. ❖ **Expanded Sample Size:** ➢ Rent data to be collected from **all selected dwellings monthly** (earlier one-sixth of the total sample). ➢ Reform based on **IMF technical guidance** for better representation. ❖ **Exclusion of Employer-Provided Housing:** Removes **non-market dwellings** (like government quarters) to improve accuracy. ❖ **Refined Calculation Formula:** Ensures **"like-for-like" comparison** and removes **downward bias** in rent index estimation.
Inclusion of the Rural Sector	❖ **HCES 2023–24** captures **rural rent and imputed rent** for the **first time**. ❖ Enables creation of a **rural housing index**, missing in the 2011–12 series. ❖ New index to reflect **comprehensive national housing trends**.
Importance	❖ Brings India's CPI methodology in line with **global best practices**. ❖ **Continuous rural-urban data** will strengthen inflation analysis. ❖ **Exclusion of distortive elements** (like free housing) ensures a truer reflection of rental pressure. ❖ Helps **RBI, policymakers, and households** gauge real inflation and income impact more precisely.

Conclusion	By including **rural data**, ensuring **monthly updates**, and **eliminating distortions**, MoSPI aims to deliver a **more credible, data-driven, and policy-relevant** inflation index suited to India's evolving economy.

Topic 5 - Household Income Survey 2026	
Syllabus	Economy | Data
Context	India will conduct its **first-ever Household Income Survey (HIS)** in **2026**, aiming to measure real household incomes directly for the first time.
Why India Needs Reliable Income Data	❖ **Current Limitations:** India currently lacks direct and precise income data, hindering accurate assessments of inequality and living standards. Existing methods have significant limitations: ➢ **Periodic Labour Force Survey (PLFS):** Focuses on employment and wages, not total income. ➢ **Household Consumption Expenditure Surveys (HCES):** Infer income indirectly based on expenditure patterns, which is an estimation. ➢ **RBI's Consumer Confidence Survey:** Only captures perceptions about income, not verifiable figures. ❖ **Significance:** HIS 2026 will directly link **income, expenditure, and welfare**, giving a **true picture of inequality** and living standards.
Design and Scope of the Household Income Survey (HIS) 2026	❖ **Conducting Body:** National Statistics Office (**NSO**) under the Ministry of Statistics & Programme Implementation (MoSPI). ❖ **Comprehensive Data Collection:** ➢ **Household Socio-Economic Profile:** ■ Religion and social group. ■ Primary occupation and employment status (farm vs. non-farm). ➢ **Assets and Liabilities:** ■ Ownership of land. ■ Type and value of residential property. ■ Outstanding loans and debt. ➢ **Detailed Income Components:** ■ **Salaried Employees:** Includes wages, bonuses, overtime pay, and income from stock options. ■ **Casual Workers:** Records daily wages earned and the total number of workdays. ■ **Self-Employed:** Captures gross receipts and input costs from crop sales and business operations. ❖ **Integrated Data Approach:** Links **income, assets, debt, and expenditure** for accurate and holistic mapping of household income.

Income–Expenditure–Welfare Linkage	❖ Borrowed elements from **HCES** for balanced analysis. ❖ Includes **input costs** in farm and non-farm activities to calculate **real profits**. ❖ Inclusion of various income sources such as **pensions, remittances, and welfare transfers** (e.g., state schemes like **Kalaignar Magalir Urimai Thittam** and central government schemes). ❖ Helps assess **the role of welfare programs** in uplifting poor and marginalised households.
Key Challenges (Pilot Findings – 2025)	❖ **Reluctance to Disclose:** ➢ 95% of respondents found income questions sensitive. ➢ Fear of privacy breaches or tax misuse. ❖ **Recall Errors:** Overreporting expenses or miscalculating income, especially in urban areas. ❖ **Urban vs Rural Comfort:** Rural respondents are more cooperative; urban affluent households are hesitant. ❖ **Proposed Solution:** Self-compilation option for high-income groups to ensure data privacy.
Significance for Policymaking	❖ India's **first authentic, nationwide income database**. → Provides income data for **updating the Consumer Price Index (CPI)** base year. ❖ Enables: ➢ Mapping of **income inequality** across regions and social groups. ➢ Inter-personal and inter-household income **comparisons**. ➢ Assessing the **impact of welfare transfers** and **farm income policies**. ➢ **Evidence-based policy design** in taxation, poverty reduction, and employment. ❖ Strengthens **data credibility** and supports India's goal of **inclusive, evidence-driven growth**.
Conclusion	The **Household Income Survey 2026** marks a transformative step in India's statistical evolution. By capturing real income data across all sections, it will empower policymakers with precise tools to promote **equity, welfare, and sustainable economic development**.

Topic 6 - Extreme Poverty	
Syllabus	Economy | Poverty
Context	On **Kerala Piravi Day (Nov 1, 2025)**, CM **Pinarayi Vijayan** announced that **Kerala has eradicated extreme poverty**, becoming the **first Indian state** to achieve this milestone after a 4-year targeted drive under the **Extreme Poverty Eradication Programme (EPEP)** - aligning with **UN SDG 1 (No Poverty)**.
Understanding Extreme Poverty	❖ **Definition (UN): Extreme Poverty** is the most severe form of deprivation, characterized by insufficient resources to meet the most basic human needs for survival (food, shelter, healthcare and education) and dignity. ❖ **Global Benchmark (World Bank, 2025):** ➢ **Extreme Poverty:** <$3/day (2021 PPP) → ~**9.9%** of world population (2025). ➢ **Lower-Middle Income Line:** $4.20/day ➢ **Upper-Middle Income Line:** $8.30/day ❖ **India's Progress:** ➢ Declined from **16.2% (2011–12)** to **2.3% (2022–23)**. ➢ **171 million** people were lifted from extreme poverty. ➢ Driven by rising employment and urbanisation.
Measuring Poverty in India	❖ **NITI Aayog's Multidimensional Poverty Index (MPI):** ➢ Based on the **Alkire-Foster methodology** with 12 indicators under: ■ **Health**: Nutrition, child mortality, maternal health. ■ **Education**: Years of schooling, attendance. ■ **Living Standards**: Housing, sanitation, cooking fuel, and assets. ❖ **Kerala's MPI (2021):** 0.7% - **lowest in India.** ❖ Poverty fell from **59.8% (1970s)** to near zero due to strong public welfare in education, health, and social security.
Kerala's Model – Extreme Poverty Eradication Programme (EPEP)	❖ **Launch (2021):** Led by **Local Self-Government Department (LSGD)**; ~**4 lakh personnel** trained. ❖ **Identification:** ➢ Initial families: **1.18 lakh** → verified **59,000** families. ➢ Based on income, housing, food, and health vulnerability. ❖ **Key Interventions:** ➢ **Housing:** 4,677 homeless → 4,005 given homes (Life Mission). ➢ **Food Security:** 20,648 families provided daily meals. ➢ **Documentation:** Avakasam Athivegam campaign ensured Aadhaar, voter ID, bank a/c, LPG, pension, MGNREGS cards. ❖ **Collaborative Governance:** Bipartisan support, local participation, and strong data verification.

Significance of the Achievement	❖ **India's 1st state to claim zero extreme poverty.** ❖ Showcases **micro-level planning**, **data-driven targeting**, and **welfare convergence.** ❖ Reinforces Kerala's legacy in **human development and social justice.**
Conclusion	Kerala's success in eradicating extreme poverty marks a **historic milestone in India's welfare journey**. Through decentralised planning, targeted interventions, and inclusive governance, it offers a **replicable model** for sustainable poverty eradication - blending **welfare with dignity and empowerment.**

Topic 7 - Insolvency and Bankruptcy Code (IBC)

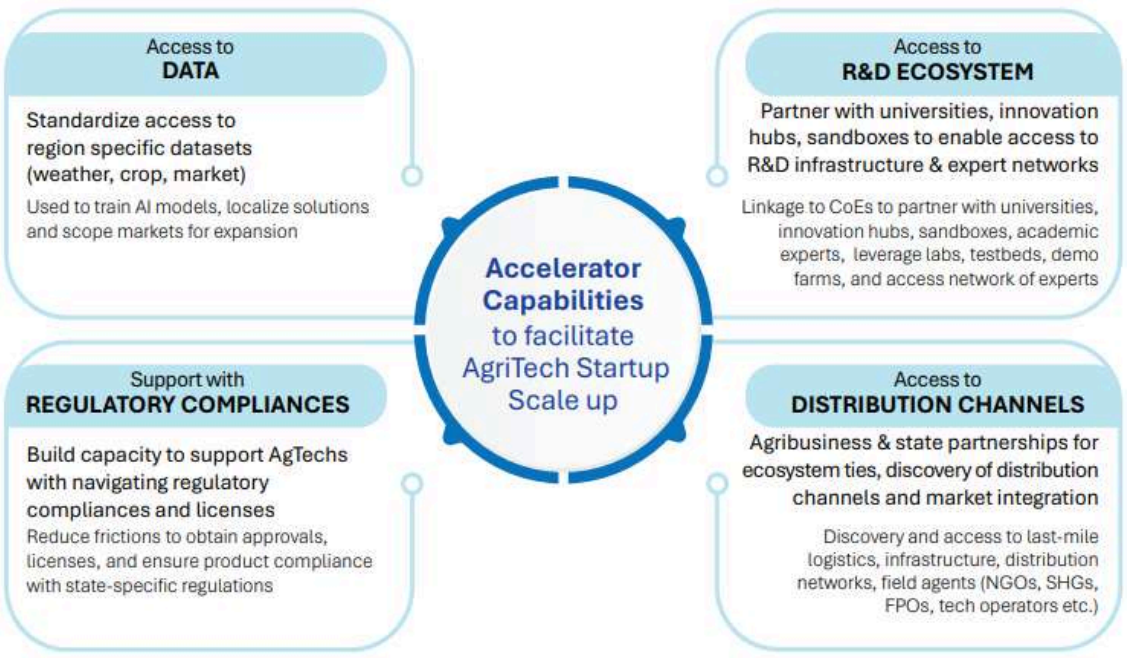
Syllabus	Indian Economy | Banking & Finance
Context	Enacted in 2016, the Insolvency and Bankruptcy Code (IBC) aimed to resolve India's mounting NPAs through a time-bound, creditor-driven process. Eight years later, it has reshaped credit culture but faces operational delays and legal bottlenecks.
India's Insolvency Landscape Pre-IBC	❖ Fragmented mechanisms like the **SARFAESI Act**, Debts Recovery Tribunals **(DRTs)**, and the **Company Law Board** caused long litigations and poor recovery. ❖ IBC centralized insolvency resolution via National Company Law Tribunal **(NCLT)**, targeting completion within **330 days**, failing which liquidation begins.
Performance Snapshot (2016–2025)	❖ **Companies Resolved:** 1,194 ❖ **Total Recovery:** ₹3.89 lakh crore (Recovery Rate: 32.8%) ❖ **Contribution to Bank Recoveries (FY 2023–24): IBC – 48%**, SARFAESI – 32%, DRT – 17%, Lok Adalat – 3%. ❖ **Pre-admission Settlements:** 30,310 cases worth ₹13.78 lakh crore settled before formal admission. ❖ **Impact:** NPAs fell from **11.2% (2018)** to **2.8% (2024)** - indicating improved credit discipline.
Structural Strengths of the IBC	❖ **Resolution over Liquidation:** Focuses on the **revival of distressed firms**, protecting jobs and asset value. ❖ **Creditor-Centric Design: The Committee of Creditors (CoC)** controls resolution, ensuring commercial independence. ❖ **Behavioral Change:** Fear of insolvency promotes early settlements and borrower discipline.
Key Challenges	❖ **Judicial Delays:** 78% of CIRP cases exceed 270 days due to **NCLT backlog**, weakening resolution efficiency. ❖ **Legal Uncertainty:** Reopened cases (e.g., Bhushan Power & Steel) erode finality and investor confidence.

	❖ **High Haircuts:** Average haircut nearly **67%**, raising doubts on valuation methods and bidder participation. ❖ **Evolving Business Models:** IBC still lacks clarity for **tech startups, IP-driven assets, and employee dues**.
Way Forward	❖ **Institutional Strengthening:** Expand **NCLT benches**, adopt **digital workflows**, and ensure timely disposal. ❖ **Judicial Restraint:** Protect the **commercial wisdom of CoC** from excessive post-resolution interference. ❖ **Pre-Pack Mechanisms:** Promote faster, cost-efficient **pre-packaged insolvency** for MSMEs and startups. ❖ **Sectoral Adaptation:** Codify norms for **tech, service, and IP-based firms**; prioritize employee claims.

Topic 8 - India's IT Dream at a Crossroads	
Syllabus	Indian Economy | Service Sector
Context	India's once-dominant IT outsourcing industry is undergoing a critical shift, pressured by **AI automation, widespread layoffs, and evolving skill requirements**. The central challenge is transitioning from a model focused on **"outsourcing manpower" to cultivating "mindpower."**
Indian IT Sector: Key Dynamics and Strategic Shift	❖ **Economic Impact:** The Indian IT sector is a vital part of the economy, contributing **7% to India's GDP**, employing **6 million individuals**, and generating **$280 billion annually**. However, the industry is undergoing a significant transformation: ➢ **Model Disruption:** The traditional business model, heavily reliant on **mass coding and support services**, is being fundamentally disrupted by the rise of **AI-driven, high-value service delivery.** ➢ **Strategic Pivot:** As a result, IT firms are reorienting their focus toward **cloud computing, data analytics, and consulting centered on automation.**
Causes of Crisis	❖ **AI and Automation:** Agentic AI tools are increasingly automating core tasks like coding, testing, and maintenance, significantly **reducing the need for human labor.** ❖ **Skill Obsolescence:** Older technologies (like Java, SAP, mainframes) are becoming irrelevant as demand spikes for expertise in **AI, cloud, and cybersecurity.** ❖ **Global Economic Slowdown:** Budget cuts stemming from economic weakness in the U.S. and Europe have led to **trimmed outsourcing contracts.** ❖ **Shift in Client Demand:** Clients now prefer **specialized**, **agile teams** for targeted solutions instead of large manpower contracts. ❖ **Global Policy Headwinds:** Higher H-1B visa fees and increased localization

	demands make **overseas operations more costly.**
Opportunities for India	❖ **Massive AI Upskilling:** Firms like TCS are leading efforts, retraining **over 5 lakh employees** to create the world's largest AI-ready talent pool. ❖ **Deep-Tech Innovation:** A vibrant ecosystem of **1000+ AI and SaaS startups** is driving innovation beyond traditional IT services. ❖ **Educational Reform:** Modernizing engineering curricula to integrate **ML, AI ethics, and product design.** ❖ **Global Digital Ties:** Strengthening international cooperation on **data governance and digital trade.** ❖ **Market Diversification:** Expanding into high-growth areas such as **cybersecurity, cloud architecture, and AI consulting.**
Key Challenges	❖ **Job Displacement:** Mid-level professionals face significant **redundancy risks** without adequate safety nets. ❖ **Low R&D Investment:** Spending **below 1% of GDP on research** severely limits potential for innovation. ❖ **Digital Divide:** Unequal access to essential AI tools and learning infrastructure persists. ❖ **Outdated Education System:** Many colleges continue to teach obsolete programming languages. ❖ **Worker Stress:** Layoffs and job uncertainty are creating economic and **mental strain** on the workforce.
Way Forward	❖ **National AI Skilling Mission:** Establishing a unified mission to link **academia, industry, and government** for rapid, large-scale reskilling. ❖ **Core Curriculum Reform:** Making **AI and Data Science** mandatory subjects in engineering programs. ❖ **Innovation Ecosystem:** Creating dedicated **AI research parks and deep-tech incubators.** ❖ **Worker Protection:** Implementing policies to ensure **6–9 months of severance** and dedicated retraining funds. ❖ **Policy Modernization:** Promoting **data sovereignty, export incentives, and global technology alliances.**
Conclusion	India's IT revolution is not declining but is instead **transforming into an AI-powered next chapter.** By implementing bold policies, committing to skill renewal, and fostering innovation, India is well-positioned to **lead the next digital frontier**, turning disruption into a new era of global leadership and technological self-reliance.

Topic 9 - Reimagining Agriculture Report	
Syllabus	Agriculture & Technology
Context	NITI Aayog's Frontier Tech Hub launched the report **"Reimagining Agriculture: A Roadmap for Frontier Technology-led Transformation"** in Gandhinagar, envisioning a 2047 tech-driven, sustainable, and inclusive agricultural revolution.
Vision & Framework	❖ **Vision:** Transform Indian agriculture from **input-intensive** and fragmented to **innovation-driven, data-powered, and sustainable**. ❖ **Goal:** Boost **productivity** and **farmer incomes** by using "frontier technologies" (AI, IoT, drones, digital twins, bio-innovation). ❖ **Framework:** Based on **3 Pillars** (under proposed "Digital Agriculture Mission 2.0") ➢ **Enhance**: Build foundational systems (**data ecosystems**, last-mile connectivity, and farmer-centric digital services). ➢ **Reimagine**: Strengthen **Agri-R&D**, skill development, and innovation ecosystems. ➢ **Converge**: Align public-private collaboration, policy-industry convergence for scale. ❖ **Farmer Categories:** ➢ **Aspiring Farmers** (~70-80 %): Small/rain-fed, low tech-adoption (inclusion). ➢ **Transitioning Farmers** (~15-20 %): Medium size, starting to adopt advanced tech. ❖ **Advanced Farmers** (~1-2 %): Large scale, export-oriented, high tech usage.
Current Agricultural Scenario	❖ Agriculture is a critical sector, employing **45.8%** of India's workforce and contributing to an annual food production of approximately **1 billion tonnes**. ❖ **Challenges:** ➢ **Land Issues:** Extreme land fragmentation, with **86%** of farmers owning less than 1 hectare. ➢ **Operational Inefficiencies:** Low levels of mechanisation and high post-harvest losses (USD 18 bn). ➢ **Infrastructure and Climate Risks:** Limited access to digital services, persistent



	credit gaps, and severe **climate stress** impacting rainfall patterns, soil health, and groundwater reserves.
Frontier Tech Opportunities	❖ **AI & Analytics:** Precision farming, weather & pest advisories → 21% yield rise in Telangana pilot. ❖ **Gene Editing (CRISPR):** Develop climate-resilient, nutrient-rich crops. ❖ **Smart Mechanisation:** Drones + IoT for precision irrigation & fertilisation. ❖ **Blockchain:** Transparent farm-to-fork traceability & data sovereignty. ❖ **AgriTech Start-ups:** 1000+ startups driving AI, fintech, and robotics for inclusive access.
Key Government Initiatives	❖ **Digital Agriculture Mission (2021–25):** Unified farmer data ecosystem. ❖ **National Mission on Sustainable Agriculture:** Promotes climate-smart practices. ❖ **Kisan Drone Scheme:** Enables precision spraying and mapping. ❖ **PM-Kisan & eNAM:** Strengthen income and digital marketplace access. ❖ **AgriStack & Accelerator Fund:** Build digital backbone and startup support.
Major Challenges	❖ Data silos & lack of interoperability. ❖ **Trust Deficit:** Farmer concerns over data privacy and reliability of new technologies. ❖ Rural phygital divide (poor connectivity, logistics). ❖ **Ecosystem Fragmentation:** Poor coordination among government, industry, academia, and regulators. ❖ **Talent Gaps:** Shortage of interdisciplinary AI–agriculture skills for smart farming systems. ❖ Funding and risk-capital constraints for deep-tech innovation.
Key Recommend-ations	❖ **Digital Agriculture Mission 2.0:** Develop AI-integrated data systems and innovation accelerators. ❖ **Translational R&D:** Link labs with fields for real-world adoption. ❖ **Agri-Talent Ecosystem:** Train farmers in AI, IoT, and digital literacy. ❖ **Institutional Synergy:** Set up centres of excellence & foresight units. ❖ **Inclusive Finance:** Use AI-powered credit & insurance models for smallholders.
Conclusion	NITI Aayog's roadmap marks the dawn of an Intelligent Agricultural Revolution where **data becomes the new soil and AI the new plough**. By merging innovation with inclusion, India can achieve productive, sustainable, and tech-empowered agriculture for **Viksit Bharat 2047**.

Topic 10 - Universal Basic Income	
Syllabus	Economy | Income
Context	The idea of Universal Basic Income (UBI) is gaining momentum as India faces inequality, jobless growth, and welfare inefficiencies, prompting calls to redesign welfare delivery with UBI at the core.
What is Universal Basic Income (UBI)?	❖ A **periodic, fixed,** and **unconditional cash transfer** to all citizens, regardless of their income, wealth, or employment status. ❖ Aims to ensure **minimum economic security**, reduce poverty, and simplify welfare delivery (proposed in India's **Economic Survey 2016-17** as a potential "radical safety net").
Key Features	❖ **Universality:** Covers all citizens equally. ❖ **Unconditionality:** No work or eligibility criteria. ❖ **Periodic**: Paid at **regular, fixed intervals** (e.g., monthly). ❖ **Cash-based:** Transferred **directly in cash** (typically via DBT) rather than in-kind transfers (food, subsidised goods). ❖ **Rights-Based:** Treats income security as a citizen right.
Need for UBI in India	❖ **High Inequality:** Top 10% own 77% of wealth; Gini index at 75. ❖ **Jobless Growth:** GDP up, but unemployment and automation risks rising. ❖ **Welfare Fragmentation:** 400+ schemes with leakages & duplication. ❖ **Low Well-being:** India ranks 126/137 in the happiness index. ❖ **Unpaid Care Work:** Women's invisible work = 13% of GDP.
Global Evidence Supporting UBI	❖ **India (MP Pilot):** Better nutrition (+25%), school attendance (+12%), micro-business growth (+17%). ❖ **Finland:** Higher well-being and stable employment. ❖ **Kenya:** +40% food security & rise in local enterprises. ❖ **Iran:** Cash transfers reduced poverty without inflation.
Challenges	❖ **Fiscal Burden:** 5% of GDP needed - requires restructuring taxes/subsidies. ❖ **Targeting Dilemma:** Universality risks benefit dilution; phased rollout needed. ❖ **Inflation Risk:** A sudden demand surge may raise prices. ❖ **Digital Divide:** Poor DBT access may exclude vulnerable groups. ❖ **Political Hurdles:** Hard to replace populist subsidy-driven politics.
Way Ahead	❖ **Phased Rollout:** Start with women, the elderly, and informal workers. ❖ **Complement Schemes:** Retain essential programs like PDS & MGNREGA. ❖ **Progressive Financing:** Wealth/carbon taxes + cutting wasteful subsidies. ❖ **Strengthen JAM:** Improve DBT accuracy, access, and grievance systems.

	❖ **Institutional Oversight:** Create a Social Security Commission for evaluation & monitoring.
Conclusion	UBI can reshape India's welfare system into a simpler, inclusive, and rights-based framework. As inequality and job uncertainty rise, ensuring basic income security may be essential for a stable and dignified future.

Topic 11 - National Industrial Classification (NIC) 2025	
Syllabus	Economy | National Industrial Classification Revision
Context	The **NIC 2025** marks a major update to India's system of classifying **economic activities**, aligning it with global standards and emerging sectors to improve policy design and official statistics.
What is NIC 2025?	❖ A **standardized six-digit classification system** for all economic activities in India. ❖ Released by: Ministry of Statistics and Programme Implementation (MoSPI) ❖ Replaces the earlier **five-digit NIC 2008**. ❖ First introduced in **1962**, revised in 1970 → 1987 → 1990 → 1998 → 2004 → 2008 → now **NIC 2025**. ❖ **Purpose**: Provides a **uniform classification system** for economic activities used in: ➢ Statistical surveys (e.g., Annual Survey of Industries) ➢ Censuses ➢ National accounts (GDP calculation) ➢ Policy formulation and research.
Key Features	❖ Aligned with **UN International Standard Industrial Classification (ISIC) Revision 5**. ❖ Includes **emerging sectors**: Digital economy (AI, fintech, Cloud, blockchain), e-commerce and platform-based economy, renewables, waste management, and AYUSH. ❖ Adds **new classes** for logistics, real estate services, food services, and environmental remediation. ❖ **Granular Detailing**: Provides finer sub-classifications for better measurement of modern industries. ❖ Becomes the **official standard** for all government surveys, statistics, and policymaking.

Govt Schemes

Topic 1 - PM-SHRI Schools	
Syllabus	Govt Schemes | Rural Development
Context	Kerala has reversed its earlier stance and agreed to implement the **PM-SHRI Schools Scheme**.
About PM-SHRI Scheme	❖ **Full Form:** PM Schools for Rising India (PM-SHRI) ❖ **Launched:** 2022 under the NEP 2020 framework. ❖ **Aim:** Upgrade **14,500 existing government schools** into model institutions showcasing NEP principles. ❖ **Coverage:** Elementary to senior secondary levels in central, state, and local body schools. ❖ **Funding Pattern:** 60:40 (Centre: State).
Core Objectives	❖ Implement **competency-based learning** with a focus on innovation, art/toy-based education & vocational training. ❖ Ensure **foundational literacy & numeracy**, zero dropouts, and enhanced learning outcomes. ❖ Introduce **skill labs** and modern teaching practices. ❖ Curriculum aligned to **NCF or SCF** under NEP 2020. ❖ Evaluation via **School Quality Assessment Framework** - performance-linked funding.
Funding and Linked Schemes	❖ Linked to **Samagra Shiksha** (same 60:40 ratio). ❖ **Centre made PM-SHRI participation mandatory** for the release of Samagra Shiksha funds, which cover: ➢ **RTE implementation**, ➢ **Uniforms & textbooks**, ➢ **Support for children with disabilities**, ➢ **EWS reimbursements** to private schools.

Topic 2 - YUVA AI for ALL Initiative	
Syllabus	Economy | Agriculture & Food Security
Context	The **YUVA AI for ALL** initiative is a free national AI-literacy programme launched by MeitY to equip Indians with a basic, ethical, and practical understanding of Artificial Intelligence.
What is YUVA AI for ALL?	❖ A **free 4.5-hour self-paced online AI course** for all citizens. ❖ Launched by **MeitY** under the **IndiaAI Mission**. ❖ Developed by AI expert **Jaspreet Bindra**. ❖ **Aim** ➢ To train **1 crore+ Indians** in basic AI concepts. ➢ To promote **ethical, responsible AI adoption** across society.
Key Features	❖ **Completely free**, with a **government-certified certificate**. ❖ Available on **FutureSkills Prime, iGOT Karmayogi**, and other ed-tech platforms. ❖ **Six-module curriculum**: AI basics, applications, safety, ethics, opportunities. ❖ Uses **Indian examples** for practical understanding. ❖ Open to **students, professionals, and general learners**.
Significance	❖ **Democratizes AI literacy** by making foundational AI learning accessible to all. ❖ **Builds India's future workforce** for a digital and AI-driven economy. ❖ Emphasizes **ethical and safe AI use**, promoting responsible tech adoption.

Topic 3 - Bharat Taxi: India's First Cooperative Cab Service	
Syllabus	Government Schemes | Economy & Governance
Context	India is launching **'Bharat Taxi'**, the nation's **first cooperative cab service**, in **November 2025 (Delhi)**.
What is Bharat Taxi?	❖ **Model:** A **government-supported cooperative ride-hailing platform** designed as a **citizen-centric alternative** to existing global aggregators (e.g., Ola and Uber). ❖ **Key Difference:** Unlike corporate aggregators, this model grants cab drivers **ownership** and **profit-sharing rights**. ❖ Aims to prioritize **driver welfare**, ensure **affordability for passengers**, and promote **transparency** through digital integration.
Implementation	❖ **Ministries Involved:** Union Ministry of Cooperation & National e-Governance Division (NeGD). ❖ **Operator:** Sahakar Taxi Cooperative Ltd (Registered under Multi-State Cooperative Societies Act, 2002). ❖ **Financial Support:** ₹300 crore capital backed by major cooperative institutions: **Amul, IFFCO, NAFED, KRIBHCO, NABARD, and NCDC.**
Key Features	❖ **Driver Ownership Model: Cooperative-Owned** → Drivers (**Saarthis)** are **members** and **shareholders** in the cooperative. ❖ **Zero Commission Structure**: Drivers keep **100% of their earnings**, with only a nominal membership fee applied. ❖ **Digital Integration:** Connected to **DigiLocker, UMANG, and API Setu** for seamless identity and service verification. ❖ **Fare Structure: Transparent, fair,** and **government-regulated fares** with **no hidden commissions** → eliminating arbitrary **surge pricing**. ❖ **Phased Rollout:** ➢ Launch: The service will commence with **650 drivers** in **Delhi (November 2025).** ➢ **Expansion Goal:** To cover **20 cities by 2026** and scale up to **1 lakh cabs by 2030**.

History

Topic 1 - Gyan Bharatam Mission	
Syllabus	Government Schemes
Context	The **Gyan Bharatam Mission**, launched by the **Ministry of Culture**, seeks to conserve, digitise, and promote India's vast ancient manuscript heritage, integrating technology with cultural preservation.
Background	❖ India holds one of the world's richest **manuscript traditions** in languages like **Sanskrit, Pali, Prakrit, Tamil, Persian, and Arabic.** ❖ These manuscripts cover diverse fields - **philosophy, medicine, astronomy, law, literature**, and more. ❖ Many are scattered across libraries, monasteries, and private collections, facing **threats of decay and neglect.** ❖ To safeguard this knowledge, the government launched the **Gyan Bharatam Mission** as a **national conservation and digitisation drive.**
About Gyan Bharatam Mission	❖ Aim: To **identify, conserve, digitise, and promote** India's manuscript heritage through a **technology-driven framework.** ❖ Core Feature: Establishment of a **National Digital Repository (NDR)** - a centralised digital archive accessible globally. ❖ Objective: Bridge **ancient knowledge systems** with **modern academic research** and encourage interdisciplinary collaboration.
Institutional Collaboration	❖ Around **50 institutions** are to sign **MoUs** with the Ministry of Culture for conservation and digitisation. ❖ Includes both **national and regional repositories**, ensuring pan-India coverage.
Global & National Significance	❖ Aligns with India's goal of **"Reclaiming Knowledge Legacy"** and **UNESCO's Memory of the World Programme.** ❖ Enhances **India's soft power** and global cultural leadership. ❖ Supports **Digital India**, merging heritage with modern technology and scholarship.

Topic 2 - Gold Coins from Vijayanagara Era	
Syllabus	Indian History
Context	Over 100 gold coins from the Vijayanagara period were recently unearthed in Tamil Nadu, offering fresh insights into the medieval South Indian temple economy and craftsmanship.
Discovery Highlights	❖ **Location: Kovilur Shiva Temple**, **Tiruvannamalai district** (Later Chola period site). ❖ **Findings:** 103 gold coins of varying shapes and sizes were found in an earthen pot near the sanctum. ❖ **Action Taken:** Tamil Nadu State Archaeology & Revenue Departments secured the site under the Indian Treasure Trove Act, 1878. ❖ **Distinct Features:** ➢ Coins bear the boar emblem (Varaha) - royal symbol of Vijayanagara kings. ➢ Likely minted during **Harihara II** or **Krishnadevaraya's reign** (14th–16th century CE - **Sangama and Tuluva dynasties**). ➢ Estimated size ~5 mm; made of pure gold; possibly used as temple donations or endowments.
Vijayanagara Coinage	❖ **Period:** 1336–1646 CE | Founded by Harihara I & Bukka I under the guidance of Vidyaranya. ❖ **Capital:** Hampi - political, religious, and economic hub of South India. ❖ **Types of Coins:** ➢ Gold pagodas (gadyanas), silver taras, and copper jitals. ➢ Gold coins were reserved for religious & royal purposes. ❖ **Design & Imagery:** ➢ Depicted deities like Vishnu-Lakshmi, Uma-Maheshwara, Balakrishna, and Gandaberunda (double-headed eagle). ➢ Inscriptions in Kannada, Tamil, or Devanagari, bearing ruler titles like "Sri Pratapa Krishna Raya." ❖ **Symbolism:** Varaha (boar) emblem - symbolized divine kingship and state authority. ❖ **Economic Role:** Served as both temple wealth and trade currency, circulating across South India and Indian Ocean routes.

Topic 3 - Meerut Bugle	
Syllabus	Art and Culture | GI Tag
Context	The **Meerut bugle**, a traditional military brass instrument, has received a **GI tag**, recognizing its historic craftsmanship and cultural link to India's military heritage.
What is the Meerut Bugle? 	❖ A brass **wind instrument** used in military **drills, parades, ceremonies, and signals**. ❖ **Key Feature:** Distinguished by its **loud, commanding sound** and its deep association with India's regimental history. ❖ **Origin:** Its history dates back to **the 19th century** during the British Raj in Meerut. ❖ **Legacy:** Over time, Meerut evolved into a central hub for the **handmade bugle-making** industry.
What is a GI Tag?	❖ A **Geographical Indication (GI)** tag is a certification that identifies a product as originating from a specific territory and possessing qualities or a reputation unique to that region. ❖ **Governing Body:** Administered by the **GI Registry, Chennai**, which falls under the **Ministry of Commerce & Industry**. ❖ **Legislation:** Established under the **GI Act, 1999**, and officially implemented in **2003**. ❖ **Current Status:** India currently boasts **605 GI-tagged products** across various sectors.
Objectives of the GI Tag System	❖ **Preserve Heritage:** Protect products linked to a specific region and their **traditional crafts**. ❖ **Ensure Authenticity:** Prevent **imitation or misuse** of genuine, region-specific items. ❖ **Economic Support:** Boost market value, support **livelihoods**, and enhance a product's global presence.
Key Benefits of GI Tagging	❖ **Exclusivity:** Grants **exclusive rights** to the authorized producers from the designated region. ❖ **Protection:** Guarantees **authenticity** and makes the production of counterfeits a punishable offense. ❖ **Development:** Fosters **rural development** and helps maintain traditional skills. ❖ **Market Reach:** Enhances **export potential** and facilitates access to international markets.

Science and Technology

Topic 1 - AI Content Labeling	
Syllabus	Science & Technology | Cyber Security
Context	The Indian government has proposed new rules mandating the **labeling of AI-generated content** under the IT Rules, 2021. This aims to curb deepfakes, misinformation, and ensure transparency, without restricting creative freedom.
Key Proposal Highlights	❖ Platforms must **ask users to declare** if uploaded content is AI-generated. ❖ **Permanent labels or metadata** must identify such content. ❖ For **videos:** Label covers **10%** of the screen area; for **audio:** plays during the first 10% of the duration. ❖ Non-compliance may lead to **loss of legal immunity** under safe harbour provisions.
Definition of Synthetic Content as per Draft	❖ "Synthetically generated information" refers to content **created, altered, or modified** using algorithms to appear real. ❖ Covers **AI-altered text, images, audio, and videos.** ❖ Helps users **distinguish real from AI-generated material**, especially in sensitive domains like news, elections, finance, and public figures.
Global Practices vs India's Proposal	❖ **Meta & Google:** Already use "AI Info" or "Synthetic Content" tags, but rely on **user self-declaration**. ❖ **India's Approach:** Stricter - mandates **automated detection and proactive labeling** even without user input. ❖ **Partnership on AI (PAI) Collaboration:** Meta, Google, OpenAI, and Adobe are developing invisible AI markers for global standardisation.
Global Deepfake Regulations	❖ **EU AI Act:** Mandates clear labeling of all AI-generated/altered content in machine-readable form. ❖ **China:** Requires **visible or hidden markers** on all AI-generated media; platforms must detect and warn users. ❖ **Denmark:** Proposes granting **copyright over personal likeness**, allowing citizens to demand the removal of AI-altered content.

Topic 2 - India's New AI Governance Guidelines

Syllabus	Science & Technology | Governance
Context	The **Ministry of Electronics & IT (MeitY)** has released the **India AI Governance Guidelines**, aiming for a **light-touch, innovation-friendly regulation**.
Background & Context	❖ Prepared by a committee led by **Prof. Balaraman Ravindran (IIT Madras)**. ❖ Revised the **January 2025 draft,** earlier overseen by **PSA Ajay K. Sood**. ❖ These guidelines are separate from the **draft IT Rules amendment (2021)** concerning the mandatory labeling of AI-generated content. ❖ Aligned with **Delhi AI Impact Summit 2026** and global AI events (Bletchley Park, Seoul, Paris).
Structure of the Guidelines	The framework is divided into **four key parts**: ❖ Seven Guiding Sutras (Principles) ❖ Six Pillars of Implementation (Recommendations) ❖ Action Plan (Timelines) ❖ Practical Guidelines (Industry & Regulators).
Seven Guiding Sutras (Core Principles)	These principles serve as the ethical and philosophical foundation for AI adoption: ❖ **Trust as Foundation**: Public trust is vital for wider AI adoption. ❖ **People First**: Ensuring human-centric design and oversight. ❖ **Innovation over Restraint**: Encouraging responsible development and deployment. ❖ **Fairness & Equity**: Promoting inclusive and non-discriminatory AI systems. ❖ **Accountability:** Defining clear responsibilities and mechanisms for enforcement. ❖ **Understandable by Design:** Ensuring transparency and explainability in AI. ❖ **Safety, Resilience & Sustainability:** Building secure, ethical, and eco-conscious systems.
Six Pillars of Implementation (Key Recommendations)	These pillars outline the strategic areas for action:

Pillar	Focus Area	Specific Actions
Infrastructure	Digital Public Goods	Expanding access to data, compute resources, DPI, and strengthening platforms like **AI Kosh**.
Capacity	Skilling &	Training citizens, government officials, and MSMEs;
Policy & Regulation	Adaptive Laws	Creating agile laws to manage emerging AI risks and reviewing/amending existing acts.

Building	Awareness	promoting responsible AI awareness.
Risk Mitigation	Safeguards	Developing **India-specific risk frameworks** and utilizing **voluntary and techno-legal safeguards** for sensitive AI.
Accountability	Transparency	Introducing **graded liability systems** based on risk levels and enhancing transparency across the AI value chain.
Institutions	Governance Bodies	Establishing the **AI Governance Group (AIGG)**, **Tech & Policy Expert Committee (TPEC)**, and strengthening the **AI Safety Institute (AISI)** for trust and safety standards..

Action Plan (Implementation Timelines)

a. **Short-Term (1 Year):**
   i. From AIGG & TPEC, create risk frameworks and initiate awareness drives.
   ii. Outcome → Institutional setup & trust-building.

b. Medium-Term (2–3 Years):
   i. Set standards, run **regulatory sandboxes**, and amend laws.
   ii. Outcome → Safe experimentation, improved accountability.

c. Long-Term (Beyond 3 Years):
   i. Continuous policy review, **new AI laws** for emerging risks.
   ii. Outcome → **Future-ready AI ecosystem**.

Practical Guidelines

a. **For Industry:**
   i. Follow Indian laws, publish **transparency reports**, and set up grievance redressal systems.
   ii. Adopt **voluntary safety and bias mitigation tools**.

b. **For Regulators:**
   i. Ensure **innovation-first oversight**, not heavy compliance.
   ii. Use **techno-legal tools** like bias detection and privacy preservation.

Analytical Insights

- **Shift in Focus:** From **risk control → innovation enablement**.
- **No Immediate AI Law:** New legislation only if future risks demand.
- **Whole-of-Government Model:** Coordination across ministries and sectors.
- **Global Positioning:** Strengthens India's image as a **responsible AI power,** balancing growth and ethics.

Topic 3 - Project Suncatcher: Google's Vision for Space-Based AI Data Centers	
Syllabus	Science & Technology
Context	Google's **Project Suncatcher** plans to move AI data centers into space to use constant solar power. This ambitious initiative aims to significantly reduce carbon emissions and establish a future-proof, expandable global computing network beyond Earth.
What is it?	❖ A Google-led "moonshot" **research initiative** to test **AI data centres in orbit**, powered by **solar energy.** ❖ This involves deploying **orbiting satellites** equipped with high-performance **Tensor Processing Units** (TPUs) and utilizing **optical data links** for high-speed communication. ❖ **Primary Objectives** ➢ Reduce the **energy, water, and carbon footprint** of Earth-based data centres. ➢ Harness **uninterrupted solar power,** which is constantly available in space. ➢ Build a **scalable, interconnected satellite network** for computing.
Key Features	❖ **Solar Power:** Satellites feature solar panels that are **8x more efficient** in the orbital environment. ❖ **Computing Hardware:** Uses radiation-resistant **Orbiting TPUs (Trillium v6e)** designed for space. ❖ **Data Transmission:** Employs **high-speed optical links** (free-space optical communication) capable of achieving **terabits/second** communication between satellites and Earth. ❖ **Deployment:** The design allows for **dense satellite clustering** within a close proximity (a few hundred meters). ❖ **Timeline:** ➢ **2027:** Prototype launch scheduled to test hardware and communication systems. ➢ **Mid-2030s:** Cost viability expected due to rapidly falling launch prices (estimated at $\sim$200/kg$).

Topic 4 - Quantum Echoes Algorithm	
Syllabus	Science & Technology | Quantum Technology
Context	Google's **quantum processor "Willow"** has achieved the **first verifiable quantum advantage** using the **Quantum Echoes Algorithm**, performing tasks **13,000× faster** than top global supercomputers.
About the Quantum Echoes Algorithm	❖ **Developed by:** Google Quantum AI and Collaborators Team. ❖ **Core Concept:** Based on **Out-of-Time-Order Correlators (OTOC)** - studies how information **spreads, scrambles, and reverses** in quantum systems. ❖ **Purpose:** Acts like a **time-reversal experiment** to reveal hidden quantum interactions and validate quantum supremacy.
How It Works	❖ A **quantum signal** is sent through qubits → allowed to evolve → then **time is reversed** to generate an **"echo."** ❖ A small **perturbation** is added mid-process to test how information reorganizes. ❖ The resulting **echo interference** confirms genuine **quantum effects**, impossible to replicate classically.
Applications	❖ **Drug Discovery:** Simulates molecular reactions and drug–target behavior. ❖ **Materials Science:** Designs superconductors, quantum chips, and smart polymers. ❖ **Chemical Structure Analysis:** Advances in **NMR** techniques for ultra-precise molecular mapping. ❖ **Fundamental Physics:** Studies **quantum chaos**, **entanglement**, and **information flow** in complex systems.

Topic 5 - Quantum Key Distribution (QKD) Network	
Syllabus	Science & Technology | Quantum Technology
Context	India has achieved a major milestone in quantum-secure communication with the successful demonstration of a 500 km Quantum Key Distribution (QKD) network.
What is QKD?	❖ **Quantum Key Distribution** is a **secure communication method** that uses **quantum mechanics** to generate and share encryption keys securely between two parties. ❖ Any attempt to intercept the photons **changes their quantum state**, instantly revealing eavesdropping. ❖ **Core Principle:** The security of QKD relies on fundamental laws of physics, primarily:

	➢ **Heisenberg's Uncertainty Principle (Observer Effect):** The act of measuring a quantum state (→ a photon's polarization) inevitably **disturbs** it. ➢ **No-Cloning Theorem:** It is impossible to make a perfect copy of an unknown quantum state.
How QKD Works?	❖ Photons with random **quantum states** travel through an optical fiber as **qubits**. ❖ Measurement or tampering alters these quantum states → **intrusion detected**. ❖ After **error correction + privacy amplification**, both parties share a secret encryption key.
Types of QKD Protocols	❖ **Prepare-and-Measure (e.g., BB84 Protocol)** ➢ Uses photon polarization to generate keys. ➢ Detects eavesdropping through quantum disturbances. ❖ **Entanglement-Based QKD** ➢ Uses **entangled photon pairs.** ➢ Any disturbance is instantly noticeable. ❖ **DV-QKD (Discrete Variable):** Uses photon detectors to read discrete states. ❖ **CV-QKD (Continuous Variable):** Encodes data in the amplitude and phase of laser light.
Key Features	❖ **A 500 km quantum-secure link** was built over an existing optical fiber. ❖ Developed by **QNu Labs, Bengaluru**, supported by **DST** under the **National Quantum Mission (NQM)**. ❖ Uses **trusted nodes** for robust, end-to-end encrypted communication. ❖ Supported by **Quantum Suraksha Kavach** hardware for advanced cyber protection. ❖ Integrated **Quantum Random Number Generator (QSIP)** for high cryptographic strength. ❖ Demonstrates **civil–military collaboration (STRIDE model)** for national security use-cases. ❖ Places India among the top nations advancing **quantum-secure communication and readiness**.

Topic 6 - Does India Need Nutritional Transformation?	
Syllabus	Science | Health
Context	India is shifting focus from **food security** to **nutritional security** as deficiencies, low protein intake, and rising lifestyle diseases demand **biotech-enabled, nutrient-rich foods** for a healthier population.
Functional Foods	❖ **Meaning: Functional foods** are foods that provide health benefits beyond basic nutrition and contain bioactive compounds (like antioxidants, probiotics, omega-3s) or are fortified with nutrients (vitamins, minerals) to prevent disease and deliver specific health benefits. ❖ **Technologies:** Nutrigenomics (study of how nutrition interacts with genes), biofortification, bioprocessing, 3D food printing. ❖ **Indian Examples:** ➢ Zinc-rich rice (developed by Indian Institute of Rice Research) ➢ Iron-rich pearl millet (developed by International Crops Research Institute for Semi-Arid Tropics - ICRISAT) ❖ Fortified staples by Tata, ITC, Marico.
Smart Proteins	❖ **Meaning:** Sustainable, biotech-derived protein alternatives to traditional meat, dairy, and eggs. ❖ **Types:** ➢ **Plant-based:** Derived from sources like soy, pea, and mung. ➢ **Fermentation-derived:** Proteins produced through precision fermentation. ➢ **Cultivated Meat:** Lab-grown protein from animal cells. ❖ **India's Ecosystem:** ➢ 70+ startups (GoodDot, Blue Tribe, Evo Foods) ➢ Financial support from DBT–BIRAC for alternative proteins. ➢ A ₹4.5 crore grant from CCMB dedicated to cultivated meat research.
Why Nutritional Transformation is Needed?	❖ **Persistent Malnutrition:** High rates of stunting (35% in children) and anaemia (57% in women). ❖ **Protein Deficit:** Average daily intake (47 g) is significantly below the required level (60 g). ❖ **Evolving Consumer Demand:** The market for Functional Foods is experiencing rapid growth. ❖ **Environmental Concerns:** Livestock farming contributes approximately 5% of global GHG emissions. ❖ **Economic Burden:** Malnutrition results in an estimated annual economic loss of $12 billion.

Global Experience	❖ **Singapore:** Approved cultivated chicken in 2020. ❖ **EU:** Farm to Fork strategy supports sustainable proteins.
Significance	❖ **Health:** Combats 'hidden hunger' and strengthens the immune system. ❖ **Economy:** Positions India within the $85–240 billion global alternative protein market. ❖ **Sustainability:** Reduces reliance on natural resources (emissions, land, and water use). ❖ **Equity:** Ensures access to quality nutrition for both rural and urban populations.
Way Forward	❖ Establish a clear FSSAI regulatory framework for both functional and novel foods. ❖ Ensure coordinated policy-making across the health, agriculture, and biotechnology sectors. ❖ Promote Public-Private Partnerships (PPPs) to make nutrition technology affordable. ❖ Increase public awareness and acceptance of smart proteins. ❖ Provide training to farmers to engage in biofortification and alternative protein value chains.
Conclusion	India requires a **quality-focused nutrition revolution** driven by **biotechnology, fortified foods, and smart proteins**. An inclusive, science-backed approach will secure nationwide nutritional well-being and establish India as a leader in sustainable food innovation globally.

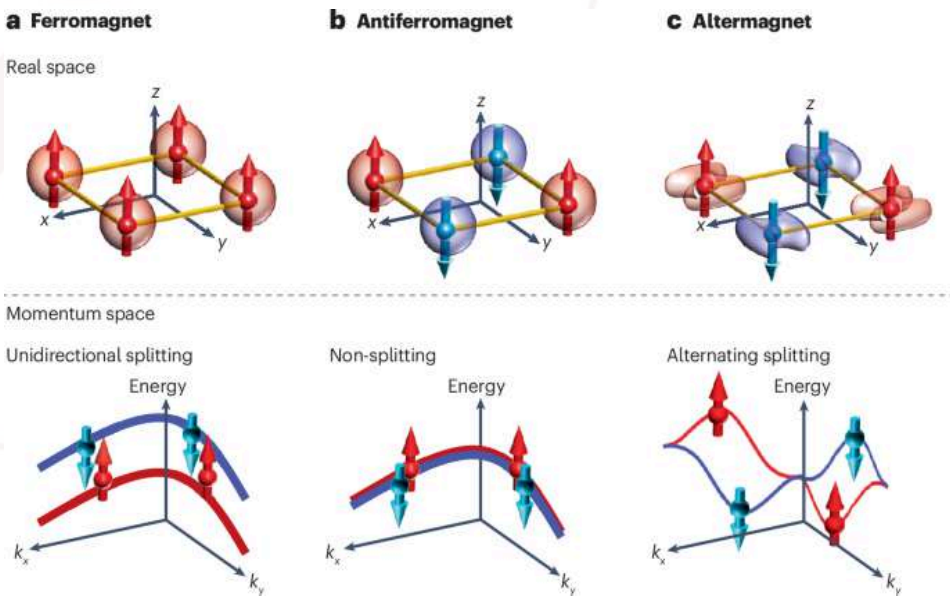
Topic 7 - BIRSA 101 Gene Therapy	
Syllabus	Science & Technology | Bio-Technology
Context	India has launched **BIRSA 101**, its first **indigenous CRISPR-based gene therapy** for **Sickle Cell Disease**, marking a major breakthrough in affordable genomic medicine.
What is BIRSA 101?	❖ India’s **first CRISPR gene-editing therapy** for **Sickle Cell Disease (SCD)**. ❖ Developed by **CSIR–IGIB** with **Serum Institute of India** scaling up production. ❖ Named after **Birsa Munda** on his 150th birth anniversary. ❖ A critical component of India's mission to eliminate SCD and become **Sickle Cell–Free by 2047**.
Objective	❖ Provide a **low-cost indigenous alternative** to global SCD therapies costing ₹20–25 crore. ❖ Deliver an **affordable, curative treatment** for India’s highly affected tribal communities.

How does it work?	❖ Uses **CRISPR gene-editing** to fix the mutation causing sickle-shaped RBCs. ❖ Edited stem cells are **re-infused**, enabling **normal haemoglobin** production. ❖ Offers a **potential one-time, lifelong cure**.
Significance	❖ **Indigenous Technology:** Built upon the fully indigenous **enFnCas9 CRISPR platform**, marking a major **Atmanirbhar Bharat** (Self-Reliant India) achievement in genomic medicine. ❖ **Global Standing:** The development places India among the **global leaders in gene-editing therapies**. ❖ **Social Impact:** Critically important for heavily affected tribal groups such as the **Gond, Bhil, Munda, and Santal**. ❖ **Cost-Effectiveness:** Demonstrates India's capability to produce **world-class gene therapies at a fraction of the global cost**.

Topic 8 - National Action Plan on Antimicrobial Resistance 2.0 (NAP-AMR 2.0)	
Syllabus	Science & Technology | Bio-Technology
Context	India has launched **NAP-AMR 2.0 (2025–29)** to strengthen its national response to rising **antimicrobial resistance**, adopting a coordinated **One Health** approach across human, animal, agriculture, and environmental sectors.
What is NAP-AMR 2.0?	❖ A **five-year national strategy (2025–29)** to tackle antimicrobial resistance. ❖ Expands the earlier **NAP-AMR 2017–21**, addressing identified gaps. ❖ Launched by the **Union Ministry of Health & Family Welfare**. ❖ **Aim** ➢ To build a **coordinated, multisectoral response** to AMR. ➢ To reduce **misuse/overuse of antimicrobials** and strengthen **surveillance, diagnostics, stewardship, and infection control**.
Key Features	❖ **One Health integration** across human, animal, environment, and food sectors. ❖ **Ministry-specific action plans** for 20+ ministries with goals, budgets, and timelines. ❖ **Enhanced AMR surveillance** and expansion of diagnostic & laboratory networks. ❖ **Antibiotic Stewardship:** Promotes rational drug use through prescription audits, regulation of Over-The-Counter (OTC) sales, and other measures. ❖ **Public & professional awareness** through campaigns and medical/veterinary training. ❖ **Strict regulation** of antimicrobial use, pesticides, and pharmaceutical waste. ❖ **Innovation push** through the India AMR Innovation Hub for new diagnostics and technologies.

Significance	❖ **Addressing High Burden:** Tackles India's significant AMR burden, which poses a threat to essential medical procedures like surgeries, cancer treatment, and routine healthcare. ❖ **Global Leadership:** Aligns with the WHO Global Action Plan, reinforcing India's role in global AMR efforts. ❖ **Accountability:** Promotes a '**whole-of-government** and **whole-of-society**' **model** to ensure effective coordination and accountability.

Topic 9 - Altermagnetism

Syllabus	Physics
Context	Altermagnetism is gaining importance due to its unique **spin-based electronic behaviour** and futuristic applications.
About Altermagnetism	❖ Altermagnetism is a newly confirmed **third class of magnetic order** that combines features of **ferromagnetism** (strong internal spin polarization, spin-split electronic bands) and **antiferromagnetism** (zero net external magnetization). ❖ This distinct magnetic phase involves **alternating atomic spins** governed by **rotational or mirror symmetries** in the crystal lattice.
Key Features	❖ **Zero Net Magnetization** externally (spins cancel external fields). ❖ **Spin-Split Electronic Bands** (electrons with opposite spins occupy different energy levels). ❖ **Symmetry-Driven Spin Arrangement** determined by the crystalline structure (symmetry). ❖ **Ultrafast Dynamics** (enables picosecond switching speeds).  ❖ **Material Versatility**, found in metals, insulators, and semiconductors (e.g., Manganese Telluride (MnTe) and Ruthenium Dioxide (RuO_2)).
Applications	❖ **Spintronics:** Facilitates the creation of faster and more energy-efficient electronic devices. ❖ **Quantum Computing:** Offers a low-magnetic-noise environment, leading to more stable qubits. ❖ **Data Storage:** Enables the development of **high-density storage** with minimal

	interference. ❖ **Ultrafast Processors:** Utilizes its terahertz switching capability for next-generation processors. ❖ **Advanced Sensors:** Allows for precise magnetic-state detection, particularly through the **anomalous Hall effect**.
Limitations	❖ Hard to synthesize defect-free materials. ❖ It cannot be detected using normal magnetometers. ❖ Scalability issues due to domain and uniformity control.

Topic 10 - India's Heaviest Communication Satellite	
Syllabus	Science & Technology | Space Missions
Context	ISRO launched **CMS-03**, India's **heaviest communication satellite (4,410 kg)**, aboard the **LVM3-M5 rocket**, marking a major leap in India's **self-reliance in heavy satellite launches**.
About CMS-03 (GSAT-7R) Satellite	❖ **Type: Multi-band** (UHF, S, C, and Ku-bands), multi-mission communication Satellite ❖ **Weight:** 4,410 kg – Heaviest to be launched from Indian soil. ❖ **Orbit:** Geosynchronous Transfer Orbit (GTO) – **29,970 km × 170 km** ❖ **Coverage:** Indian subcontinent + surrounding oceanic region ❖ **Purpose:** ➢ High-bandwidth, secure communications. ➢ Encrypted data relay for **defence and strategic use.** ❖ **Significance:** ➢ First >4,000 kg satellite launched domestically. ➢ Reduces reliance on Arianespace/SpaceX (used earlier for GSAT-11, GSAT-20). ➢ **In-Orbit Experiment**: Successful **re-ignition of cryogenic upper stage** for orbital precision → a key capability for future deep-space missions.
LVM3 (GSLV Mk III)-M5 – India's Most Powerful Rocket (Bahubali rocket)	❖ **Fourth-generation** launch vehicle of India. ❖ **Payload Capacity: GTO:** 4,000 Kg, **LEO:** 8000-10000 Kg ❖ **Stage Design: 3 Stage** ➢ **S200 (Solid Boosters):** Initial thrust for liftoff. ➢ **L110 (Liquid Core Stage):** Twin Vikas engines. ➢ **C25 (Cryogenic Stage):** Powered by **CE-20**: **Liquid OX and Liquid H2**. ❖ **Indigenous Tech:** Entirely Indian-built, including a cryogenic engine. ❖ **Success Record:** 100% - Key missions include **Chandrayaan-3 (2023).**

Significance of CMS-03 Mission	❖ **Self-Reliance:** ➢ Ends dependence on foreign launchers for 4-tonne+ satellites. ➢ Enhances **strategic and cost autonomy.** ❖ **Strategic Communication:** ➢ Secure, encrypted data for **defence, navy, and air force.** ➢ Strengthens **real-time situational awareness** across IOR. ❖ **Path to Future Missions:** ➢ Foundation for **Lunar Module LV (LMLV)** & **Space Station** payloads. ➢ Enables 80,000 kg payloads in future LEO missions. ❖ **Support for Human Spaceflight:** LVM3's reliability has been validated for **Gaganyaan HRLV** missions.
Conclusion	❖ The launch of **CMS-03** marks a historic stride in India's **heavy satellite launch capability**, boosting **strategic communication, defence readiness, and technological sovereignty** - a defining step toward India's **next-gen space ambitions** like **Gaganyaan** and the **Bharatiya Antariksh Station**.

Topic 11 - Starlink

Syllabus	Science & Technology | Space Missions
Context	**Maharashtra** has become **India's first state** to sign an agreement with Starlink to deliver satellite-based high-speed internet across government institutions and remote regions, boosting last-mile digital inclusion.
What is Starlink?	❖ SpaceX-owned **satellite broadband service** providing high-speed, low-latency internet via thousands of LEO satellites.
Aim of the Partnership	❖ Connect **remote schools, health centres, gram panchayats, tribal belts**, and government institutions. ❖ Enable **online education, telemedicine, e-governance**, and digital service delivery in rural Maharashtra.
How Starlink Works	❖ Uses **Low-Earth Orbit (LEO) satellites (~550 km)** vs traditional GEO satellites (35,786 km). ❖ Low altitude → **ultra-low latency (~25 ms)** ideal for real-time applications. ❖ Satellites linked through **optical inter-satellite links (ISLs)** → data transfers without relying on ground stations.
Key Features	❖ **Global coverage:** Constellation of thousands of LEO satellites ensures seamless access even in remote terrain. ❖ **High speed, low latency:** Supports HD streaming, video conferencing, and gaming.

	❖ **AI-driven collision avoidance:** Autonomous maneuvering reduces space debris risks. ❖ **Compact flat-panel satellites:** Efficient mass deployment on Falcon 9 rockets. ❖ **Rural connectivity priority:** Designed to reach areas where fiber or mobile towers are not feasible.

Topic 12 - Sentinel-6B Satellite	
Syllabus	Science & Technology | Space Technology
Context	The **Sentinel-6B satellite** is a new-generation ocean monitoring mission designed to enhance global tracking of **sea-level rise**, ocean dynamics, and climate change indicators through high-precision altimetry.
What is Sentinel-6B?	❖ An advanced **ocean-altimetry satellite** launched via **SpaceX Falcon-9**. ❖ Joint mission of **NASA, NOAA, ESA, Eumetsat, European Commission**, with support from **CNES**. ❖ **Objective:** It measures sea-surface height, waves, winds, and ocean dynamics to provide continuous, high-accuracy data essential for **improved climate forecasting and coastal planning**.
Key Features	❖ Equipped with **6 science instruments** for precise global sea-level measurements (~1 inch accuracy over 90% oceans). ➢ **Radar Altimeter:** Measures sea-surface height with millimetre-level precision. ➢ **Microwave Radiometer:** Corrects errors caused by water vapour to ensure more accurate altimetry readings. ❖ Orbits Earth at **~2 km/s**, completing one orbit in **112 minutes**. ❖ **Legacy:** Continues and extends the long-term altimetry data record established by predecessor missions: **Topex-Poseidon → Jason-1/2/3 → Sentinel-6 Michael Freilich**.
Significance	❖ Provides the **global reference dataset** for sea-surface height and sea-level rise. ❖ Improves **weather and storm forecasting**, including cyclones and flood modelling. ❖ Supports **maritime safety**, submarine cable protection, and climate resilience planning.

Topic 13 - INS Ikshak	
Syllabus	Science & Technology | Defence Technology
Context	**INS Ikshak,** commissioned in November 2025, is an indigenously built Survey Vessel (Large), enhancing India's hydrographic mapping, maritime safety, and defence preparedness with advanced ocean-survey capabilities.
What is INS Ikshak?	❖ Indigenously built **hydrographic survey ship** (stationed at Southern Naval Command) for coastal & deep-sea mapping. ❖ Built by **Garden Reach Shipbuilders & Engineers (GRSE), Kolkata** under a 2018 contract with nearly 80% indigenous components. ❖ Third ship in the **Sandhayak-class SVL** series, following **INS Sandhayak** and **INS Nirdeshak.** ❖ **Purpose / Role** ➢ Conduct precise hydrographic and oceanographic surveys for marine navigation. ➢ Support port development, naval operations, and maritime domain awareness. ➢ Aid blue economy projects through seabed resource mapping. ➢ Can serve as **hospital ship** (40-bed) and for **HADR (Humanitarian Assistance & Disaster Relief).**
Key Features	❖ **Survey Tools:** Multi-beam echo sounders, side-scan sonar. ❖ **AUV Ops:** 1,000 m depth AUV capability with 24-hour endurance. ❖ **ROV + Boats:** Includes ROV and four survey motorboats. ❖ **Speed:** Max speed of 18 knots. ❖ First SVL with **dedicated women's accommodation.** ❖ **Charting:** Produces nautical charts for the National Hydrographic Office. ❖ **Global Missions:** Conducts surveys for Mauritius, Sri Lanka, Bangladesh, and Myanmar.

Environment & Geography

Topic 1 - COP30 Of UNFCCC

Topic	Environment | Climate Change
Context	The 30th Conference of the Parties (COP30) in Belém, Brazil, marks a decade since the Paris Agreement. The key focus is shifting from **climate promises to tangible action**, emphasizing equity and the priorities of the Global South.
What is COP30?	❖ It is the annual UN Climate Conference held under the UNFCCC. ❖ It serves as the platform to evaluate progress on the Paris Agreement, and to negotiate future emission reductions and climate finance mechanisms. ❖ Host: **Belém, Brazil** (Amazon region).
Aim of COP30	❖ Designated as an **"Implementation COP."** ❖ Its primary goal is to translate global climate pledges into actions that are measurable and time-bound. ❖ A fundamental principle is upholding **Common But Differentiated Responsibilities and Respective Capabilities (CBDR–RC)** to ensure fair and equitable responsibilities among all nations.
Key Expected Initiatives	❖ **Global Stocktake (GST)** ➢ First full review of global climate progress since the Paris Agreement. ➢ Identifies gaps in mitigation, adaptation & finance. ❖ **New Collective Quantified Goal (NCQG)** ➢ Aims to increase climate finance from the current **$100 billion to $300 billion annually by 2035.** ❖ **Global Goal on Adaptation (GGA)** ➢ Set measurable, quantifiable adaptation targets. ➢ Ensure dedicated funding for climate resilience. ❖ **Baku-to-Belém Climate Finance Roadmap:** ➢ Mechanism for predictable, long-term climate finance for developing nations. ➢ A mechanism designed to mobilize **$1.3 trillion/year** from both public and private sources for developing nations. ❖ **Tropical Forests Forever Facility (TFFF)** ➢ A Brazil-led blended-finance fund that provides incentives to countries for conserving tropical forests worldwide. ❖ **Linking Climate & Biodiversity:** Integrates forest, ocean & soil restoration with carbon-reduction pathways.

Significance of COP30	❖ It commemorates **10 years** of the Paris Agreement, pushing the focus firmly onto **action over mere intention.** ❖ It places a critical spotlight on the need for finance, technology transfer, and capacity-building resources for the Global South. ❖ It advocates for **just transitions** across key sectors, including energy, industry, and transport.

Topic 2 - Global Cooling Watch 2025 Report

Topic	Environment | Climate Change
Context	The UNEP Global Cooling Watch 2025 report warns that **cooling demand** may **triple by 2050**, threatening climate progress and overloading power systems.
About the Report	❖ Published by **UNEP** in **November 2025 (COP30, Belém)**, this global assessment analyzes future cooling trends and proposes a pathway for near-zero emissions and equitable access (Second edition, first in 2023). ❖ Acts as a **scientific anchor for the Global Cooling Pledge**, signed by 63 countries.
Key Trends	❖ **Explosive Demand Growth:** Cooling capacity may grow **2.6× (22 → 58 TW)** by 2050, potentially causing an emission surge to **10.5 billion tons CO_2e**. ❖ **Developing World Impact:** Cooling demand in Article 5 (developing) nations is set for a **fourfold (4×)** increase. ❖ **Electricity Use:** Expected to rise **5,000 → 18,000 TWh**, stressing energy grids. ❖ **Mitigation Potential:** ➢ **Passive Cooling:** Can reduce energy use by **15–55%** and lower indoor temperatures by **up to 8°C**. ➢ **HFC Phase-down:** Full implementation of the Hydrofluorocarbons (HFCs) phase-down could prevent **0.4°C** of global warming. ➢ **Global Commitment:** The **Global Cooling Pledge**, signed by 72 countries and 80 organizations, aims for a **68% cut in cooling emissions** by 2050. ❖ **Challenges & Limitations:** ➢ **Heat Inequality:** Over **2 billion** people currently lack access to affordable and efficient cooling solutions. ➢ Significant funding gap, with adaptation finance covering **less than 20%** of global cooling needs. ➢ Fragmented and inconsistent national policies across key sectors. ➢ Continuing reliance on fossil fuels for electricity generation.
UNEP Recommendations	❖ Adopt a **Sustainable Cooling Pathway** combining passive building design, high-efficiency appliances, and clean energy sources.

	❖ Speed up **Kigali Amendment** implementation + full refrigerant recovery. ❖ Expand **green finance** through Public-Private Partnerships (PPPs), concessional loans, and climate bonds. ❖ Mandate **passive cooling standards** in buildings and urban planning. ❖ Provide subsidies to ensure **equitable cooling access** for vulnerable groups.
Conclusion	The report underscores that unchecked cooling demand is a major climate risk. Rapid, widespread adoption of efficient, equitable, and low-emission cooling systems is indispensable. The UNEP pathway provides a clear strategy to curb future emissions and build a world resilient to extreme heat.

Topic 3 - Global Methane Status Report 2025	
Topic	Environment | Climate Change
Context	The **2025 UNEP Global Methane Status Report** finds the Global Methane Pledge (GMP) is slowing emissions growth but is insufficient for the **2030 reduction target**.
Key Findings	❖ **CLE Scenario:** Projects 2030 emissions at **369 Mt** (4% below 2021 baseline). ❖ **Ambition Gap:** Current NDCs & Methane Action Plans → only **8% reduction by 2030**, far short of GMP's **30% target**. ❖ **Geography:** G20+ countries are responsible for **65% of emissions** and **72% mitigation potential**. ❖ **Policy:** 127 countries include methane in NDCs; only 6 have GMP-comparable targets.
Major Sources (by percentage of total | Mt)	❖ **Agriculture (42% | 146 Mt):** Livestock (76%), rice (21%). ❖ **Energy (38% | 135 Mt):** Oil & gas (64 Mt upstream, 17 Mt downstream), coal mining (43 Mt). ❖ **Waste (20% | 71 Mt):** Landfills (37 Mt), wastewater (30 Mt).
Global Implications	❖ **Health & Productivity:** Current "business-as-usual" (CLE) scenario → Projected **24,000 premature deaths**, **2.5 Mt crop loss**, and **6.9 million lost labour hours** by 2030. ❖ **Regional Disparities:** Non-G20+ emissions projected **+16% by 2030**, +53% by 2050. ❖ **Data Integrity:** Fossil fuel sector underreporting; actual emissions often double official inventories. ❖ **Locked-in Emissions:** Waste methane persists for decades → early mitigation critical. ❖ **Financial Gap:** MTFR needs $127B/yr, but tracked finance is only $13.7B/yr.

Topic 4 - Cloud-Seeding	
Topic	Environment | Pollution
Context	The Delhi government conducted **cloud-seeding trials** to induce artificial rain. However, only minimal rainfall was achieved, raising questions about the technique's effectiveness in combating pollution.
What is Cloud Seeding?	❖ **Definition:** A weather modification technique to enhance rainfall by introducing artificial "seed" particles into clouds. ❖ **Origins:** First tested globally in the **1940s**. ❖ **Working Principle:** ➢ Disperses **condensation or ice nuclei** (e.g., **silver iodide, salt**) into clouds. ➢ These nuclei attract water vapour, helping droplets grow and combine until they precipitate as rain. ❖ **Methods:** Aircraft, drones, rockets, or ground-based flares.
Conditions Needed for Success	❖ **Humidity:** Minimum 50% or above. ❖ **Cloud Type:** Must have adequate **depth and moisture**. ❖ **Temperature:** Cool with active condensation inside clouds. ❖ **Delhi Challenge:** ➢ Winter clouds depend on **Western Disturbances**, often shallow and moisture-deficient. ➢ Current humidity: **15–20%**, too low for rain formation.
Environmental Concerns	❖ **Chemical Used: Silver Iodide (AgI)** - effective but toxic in large quantities. ❖ **Risk:** Can harm aquatic life (even at 0.2 µg concentration). ❖ **Note:** Iodine in AgI is not considered toxic, but the long-term impact remains uncertain.
Impact on Pollution Levels	❖ Despite weak rainfall, **air quality improved slightly**: ➢ **PM2.5:** Reduced from 221–230 → 203–207 ➢ **PM10:** Reduced from 206–209 → 163–177 ❖ Areas affected: **Mayur Vihar, Karol Bagh, and Burari**. ❖ Indicates that even minor rainfall can temporarily reduce particulate matter.
Challenges & Limitations	❖ Cloud base during trials: **~10,000 ft**, too high for seeding success (ideal <5,000 ft). ❖ Highly dependent on **timing, cloud type, and moisture**. ❖ **WMO's View:** Difficult to quantify the exact impact of cloud seeding on rainfall.
Broader Perspective	❖ Cloud seeding offers **short-term relief**, similar to **smog towers or anti-smog guns**. ❖ Long-term air quality improvement requires:

	➢ **Emission control** at source (transport, industry, construction). ➢ **Regional coordination** through an **airshed-based approach**.
Conclusion	Delhi's cloud-seeding experiment provided crucial scientific insights but limited rainfall. While it can temporarily reduce pollution, sustainable air quality improvement demands **systemic emission cuts and interstate cooperation** rather than one-off weather interventions.

Topic 5 - UNEP Adaptation Gap Report 2025 – "Running on Empty"

Syllabus	Environment & Climate Change
Context	The **UNEP Adaptation Gap Report 2025** warns that the **climate adaptation finance gap** for developing nations has widened drastically, risking the global goal of resilience by **COP30**.
About the Adaptation Gap Report	❖ **Publisher: Annual** flagship report by **UNEP–Copenhagen Climate Centre.** ❖ **Purpose:** To monitor and assess the worldwide progress regarding climate change adaptation, specifically: Planning, Implementation and Finance. ❖ **Aim:** To assess readiness for climate impacts and quantify the **adaptation finance gap**. ❖ **Relevance:** Supports global negotiations under **UNFCCC** and **COP30 (Brazil)**.
Key Global Findings	❖ **Finance Gap:** ➢ Developing nations need **US$310–365 billion/year by 2035**. ➢ Current finance = **US$26 billion (2023)** → only **1/12th of the requirement**. ❖ **Falling Commitments:** Decline from **US$28 billion (2022)** → **Glasgow Pact target** of doubling finance by 2025 likely to fail. ❖ **Debt Burden: 58%** of adaptation finance via loans, many non-concessional → risks **"adaptation debt traps."** ❖ **Planning Progress: 172 countries** have at least one **National Adaptation Plan (NAP)**, but **36 are outdated**. ❖ **Private Sector Role:** Current: **~US$5 billion**; Potential: **US$50 billion/year** with policy support. ❖ **Baku–Belém Roadmap (2024):** Envisions **US$1.3 trillion/year** climate finance by 2035 through **grants & non-debt instruments**.

Figure 2.2 Status of national adaptation planning instruments across different country classifications commonly used under the UNFCCC

India and the Adaptation Gap Report	❖ **Alignment:** India's **National Action Plan on Climate Change (NAPCC)** and **State Action Plans** align with UNEP's adaptation goals. ❖ **Vulnerability:** Rising **heatwaves, floods, and glacial melts** demand urgent adaptive investments. ❖ **Leadership:** India demonstrates its commitment to climate resilience diplomacy through its leadership in the **International Solar Alliance (ISA)**, the **LiFE Mission**, and its **G20 Presidency (2023)**. ❖ **Finance Challenge:** Scaling up adaptation efforts requires greater **global partnerships** and access to **concessional funding**.
Progress So Far	❖ **Global Policy Coverage:** 172 nations with adaptation plans – near-universal recognition. ❖ **Significant Funding Increase:** UN climate funds (GCF, GEF, AF) disbursed **US$920 million in 2024** - **+86%** over the 5-year average. ❖ **Mainstreaming:** Integration of adaptation into **national development & fiscal policies**, esp. for **SIDS & LDCs**.
Way Forward	❖ **Shift in Financing:** Transition funding from debt to **grant-based or concessional** models. ❖ **Harnessing Private Capital:** Utilize **Public-Private Partnerships (PPP) and blended finance** mechanisms to mobilize an annual sum of $50 billion. ❖ **Integrating Adaptation:** Incorporate adaptation metrics into **finance and insurance systems** to measure resilience. ❖ **Dynamic National Adaptation Plans (NAPs):** Ensure regular updates to NAPs to reflect the latest scientific findings and climate data. ❖ **Enhanced Regional Cooperation:** Strengthen **South-South** partnerships (e.g., ISA, CDRI) to facilitate the sharing of adaptation technologies.
Conclusion	The **UNEP Adaptation Gap Report 2025** underscores that global adaptation cannot "run on empty." To outpace the accelerating climate crisis, the world needs **equitable finance, innovation, and solidarity**.

Topic 6 - Tropical Forests Forever Facility (TFFF) Initiative	
Syllabus	Environment | Initiatives
Context	The TFFF is a **Global South-led climate finance** mechanism launched at **COP30** to protect tropical forests through market-driven funding. **India** joined as an **Observer**, recognising its potential to make **forest conservation financially rewarding** and globally cooperative.
What is TFFF?	❖ A **blended-finance mechanism** that rewards countries for preventing deforestation through **results-based payments funded by investment returns**, not traditional aid. ❖ Proposed by **Brazil at COP28 (2023)**; launched at **COP30 (Belém, Brazil, 2025)**.
Origin of the Initiative	❖ Led by **Brazil**, with support from tropical forest nations: **Colombia, Ghana, Indonesia, Malaysia, and the DRC**. ❖ Backed by partner countries: **Germany, France, UAE, Norway, and the UK**. ❖ **Core Principle:** Focused on climate justice and equitable climate finance, anchored in the principle that **"standing forests are worth more than felled ones."**
Aim of TFFF	❖ To create a **permanent, self-sustaining global fund** monetising the ecological value of tropical forests. ❖ Strengthen multilateral climate cooperation under **Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC)**.
Key Features	❖ **Blended-finance model:** Utilises a mix of public (junior) and private (senior) capital to ensure steady and reliable returns. ❖ **Large-scale funding:** Seeks an initial **USD 25 billion** seed investment to leverage a total of **USD 100 billion**, projecting an annual return of **USD 4 billion**. ❖ **Results-based payments:** Predictable, performance-linked incentives for forest conservation efforts. ❖ **Ecosystem valuation:** Recognises the vital role of forests as global public goods for regulating carbon, biodiversity, and water cycles. ❖ **Endowment-style trust fund:** Ensures perpetual returns, not one-time grants. ❖ **Equity-focused:** Anchored in **CBDR-RC**, empowering developing forest nations.

Topic 7 - CITES Report	
Syllabus	Environment & Biodiversity
Context	A recent CITES verification mission has urged India to suspend imports of critically endangered species like gorillas, orangutans, and snow leopards until stronger checks are in place to curb illegal wildlife trade. It highlights global concerns over illegal trade masked as **captive breeding**.
About CITES	❖ **Full Form:** Convention on International Trade in Endangered Species of Wild Fauna and Flora. ❖ CITES is a **legally binding framework** established to **regulate international trade** (not habitat loss) in wild animals and plants, ensuring it does not threaten their **survival** in the wild. ❖ Drafted in **1963** (by IUCN), entered into force in **1975**. ❖ **Members:** 185 countries. ❖ **Appendices Classification:** ➢ **Appendix I:** Includes species facing the greatest threat of extinction. **Trade is highly restricted.** ➢ **Appendix II:** Species not currently threatened but whose trade must be **controlled** to prevent unsustainable exploitation. ➢ **Appendix III:** Species protected in at least one country that is seeking **international cooperation** to control its trade. ❖ **Trade Mechanism:** Import and export are permitted only through national CITES authorities. ❖ **India's Status:** India became a Party in **1976**. Domestically, the **Wildlife (Protection) Act, 1972**, governs the trade, transfer, and possession of wildlife species.
Concerns Raised by CITES Mission	❖ The reason cited was the **illegal capture** of wild animals falsely declared as captive-bred. ❖ This followed concerns raised at the CITES Standing Committee Meeting (Feb 2025) regarding imports by: ➢ The **Greens Zoological Rescue & Rehabilitation Centre (GZRRC), Jamnagar** ➢ The Radha Krishna Temple Elephant Welfare Trust, managed by **Vantara (Reliance Initiative)**. ❖ Key findings showed that while imports had valid CITES permits, there were **verification gaps** regarding: ➢ The true origin of the animals. ➢ The authenticity of "captive-bred" status. ➢ The role of commercial breeders.

Topic 8 - '#23for23' Initiative	
Syllabus	Environment & Biodiversity
Context	India marked International Snow Leopard Day (23 October 2025) by launching the '#23for23' campaign and releasing its first-ever Snow Leopard Census, estimating **718 individuals** across the Himalayas.
About the '#23for23' Initiative	❖ **Launched by:** Ministry of Environment, Forest and Climate Change (MoEFCC). ❖ **Objective:** To raise public awareness and promote community participation in snow leopard conservation. ❖ **Part of:** Global Snow Leopard and Ecosystem Protection Programme (GSLEP). ❖ **Approach:** Engages citizens through digital campaigns, field activities, and local ecosystem initiatives.
Key Highlights of India's First Snow Leopard Census (2025)	❖ **Total Count:** 718 individual snow leopards. ❖ **Regional Distribution:** ➢ **Ladakh:** 477 (highest) ➢ **Uttarakhand:** 71 ➢ **Himachal Pradesh:** 51 ➢ **Arunachal Pradesh & Sikkim:** 61 (combined) ➢ **Jammu & Kashmir (excuding Ladakh):** 58 ❖ **Conducted by:** MoEFCC, WWF-India, Snow Leopard Trust & local communities under Project Snow Leopard.

Topic 9 - The Rowmari–Donduwa Wetland Complex	
Syllabus	Ecology & Environment | Biodiversity
Context	Forest officials and experts are proposing the **Rowmari–Donduwa Wetland Complex** in **Assam** be designated a **Ramsar Site** (Wetland of International Importance). This push is based on a recent observation of significantly higher bird

Key Information about the Wetland Complex

Feature	Details
Location	Situated in the **Nagaon district, Assam**, within the **Laokhowa Wildlife Sanctuary** (70.13 sq. km), which is part of the **Kaziranga Tiger Reserve**.
Ecosystem	An interconnected **floodplain–marsh system** that functions as an essential ecological corridor connecting the **Kaziranga** and **Orang** National Parks.
Landscape	Part of the broader **Kaziranga–Orang landscape**, buffered by the **Laokhowa** and

	diversity in the complex compared to existing Ramsar Sites like Deepor Beel and Loktak Lake.
	Burhachapori sanctuaries.
Area	Approximately **2.5–3 sq. km** of marshy floodplain.
Biodiversity	Recognized as a **Biodiversity Hotspot**, hosting over **120 resident and migratory bird species**.
Bird Census (2025)	Recorded a total of **47,000+ birds** (20,653 at Rowmari Beel and 26,480 at Donduwa Beel).
Ecological Role	Serves as a vital **breeding, nesting, and feeding** habitat for threatened migratory species.

Topic 10 - Project Cheetah

Syllabus

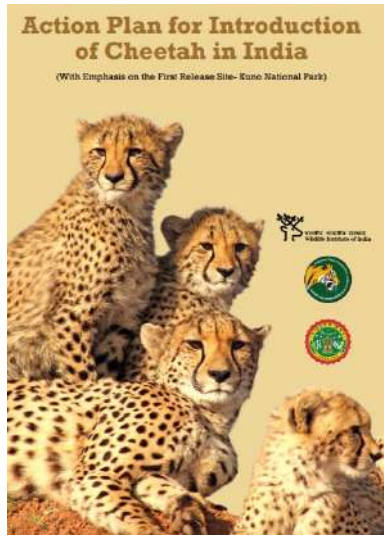
Environment & Biodiversity

Context

In November 2025, India received **8 more** cheetahs from **Botswana** under **Project Cheetah**, aiming to revive the species that went extinct in India in **1952** and restore grassland ecosystems.

About Project Cheetah

- **Project Cheetah** is the **world's first intercontinental** large carnivore translocation initiative.
- **Launched:** 2022 by the Government of India.
- **Implementing Agency**: **National Tiger Conservation Authority (NTCA)**, under MoEFCC, assisted by the Wildlife Institute of India (WII).
- **First Batch:** 8 cheetahs from Namibia, released into Kuno National Park by the Prime Minister on **17 September 2022**.
- **Objective:**
  - Reintroduce cheetahs into their **historical range** in India.
  - **Restore grassland biodiversity** and strengthen the **predator–prey balance.**
  - Promote **eco-tourism** and support **local livelihoods.**
- **Total Translocation: 8** from Namibia **+ 12** from South Africa **+ 8** from Botswana (ongoing)**.**
- **Current Status:** 35 cheetahs (including 16 cubs born in India).



	❖ **Third Translocation**: On **13 Nov 2025**, India received **8 cheetahs** (adults & sub-adults) from Botswana. Ceremony held at **Mokolodi Nature Reserve (Botswana)**, attended by Presidents **Droupadi Murmu** and **Duma Gideon Boko.** ❖ **Primary Habitat: Kuno National Park (MP)**: Selected for its suitable habitat (savanna, open grassland) and adequate prey base. ❖ Secondary Habitats: **Gandhi Sagar Wildlife Sanctuary (MP)** (on MP-Rajasthan border) is being prepared as the **second home**.
Challenges	❖ **High mortality**: Over 9 cheetahs died in 2023–24 due to stress, infection (septicemia), and territorial fights. ❖ **Habitat constraints**: Kuno may not support long-term population growth. ❖ **Human–wildlife conflict**: Risk of cheetahs straying into villages. ❖ **Genetic bottlenecks**: Limited gene pool from small founder population.
About the Cheetah	❖ **IUCN Status:** ➢ African Cheetah: Vulnerable. ➢ Asiatic Cheetah: Critically Endangered - found only in Iran.

Topic 11 - Western Disturbance (WD)

Syllabus	Geography | Climatology
Context	The IMD has recently forecasted a new WD affecting Delhi-NCR and nearby regions.
What is a Western Disturbance?	❖ **Nature and Origin:** They are **eastward-moving extra-tropical cyclones** (low-pressure systems) that originate over the **Mediterranean, Caspian, and Black Seas**. ❖ **Mechanism:** They are transported by the subtropical **westerly jet streams**, bringing **non-monsoonal winter rain and snow** to the Himalayas, North India, and Pakistan. ❖ **Affected Indian Regions:** Primarily the **Western Himalayan Region** (Jammu & Kashmir, Ladakh, Himachal Pradesh, Uttarakhand) and the **Northwest Indian Plains** (Punjab, Haryana, Delhi, Western Uttar Pradesh, and Rajasthan).

Formation Process	❖ **Origin (Mediterranean Sea):** Development begins when cold polar air collides with warm subtropical air. ❖ **Cyclogenesis:** The resulting temperature contrast creates low-pressure systems in the upper atmosphere. ❖ **Movement:** The WD travels eastward, guided by the subtropical westerly jets, drawing moisture from the Mediterranean, Caspian, and Black Seas. ❖ **Dissipation:** The system releases its moisture as rain or snow upon hitting the Himalayan mountain range, which causes it to weaken.
Key Influencing Factors	❖ **Westerly Jet Streams:** Their position and strength are critical in determining the WD's frequency and intensity. ❖ **Topography (Himalayas):** The mountain range forces the moist air to ascend, significantly increasing precipitation. ❖ **Temperature Gradient:** A stronger contrast between polar and tropical air masses enhances WD activity. ❖ **Oceanic Conditions:** Variations in Sea Surface Temperature (SST) across the Mediterranean and Eurasia influence the WD's path.
Climate Change Impact	❖ **Increased frequency and intensity** of WDs due to warming Arctic and shifting jet streams. ❖ **Seasonal shifts**: WDs now occur during **monsoon months**, causing **extreme rainfall and landslides** in the Himalayas. ❖ **Formation zones shifting eastward**, closer to India, altering traditional weather patterns.

Significance and Impact

Positive Impacts (A Boon)	Negative Impacts (A Bane)
• **Rabi Crops:** Provides essential winter rainfall for crops like Wheat, Barley, Mustard, and Gram, reducing the need for groundwater irrigation. • **Water Resources:** Cause Himalayan snowfall that sustains glaciers and maintains perennial river flow (e.g., Ganga, Indus). • **Climate & Air Quality:** Rain/snow lowers temperature and washes away pollutants, improving AQI in North Indian cities.	• **Extreme Weather:** Unseasonal heavy rain, hail, and winds damage Rabi crops before harvest (Punjab, Haryana). • **Disasters:** Trigger landslides, avalanches, and flash floods in hilly regions (e.g., 2013 North India floods). • **Cold Waves & Fog:** Post-WD clear skies bring cold, foggy conditions, disrupting transport and affecting health.

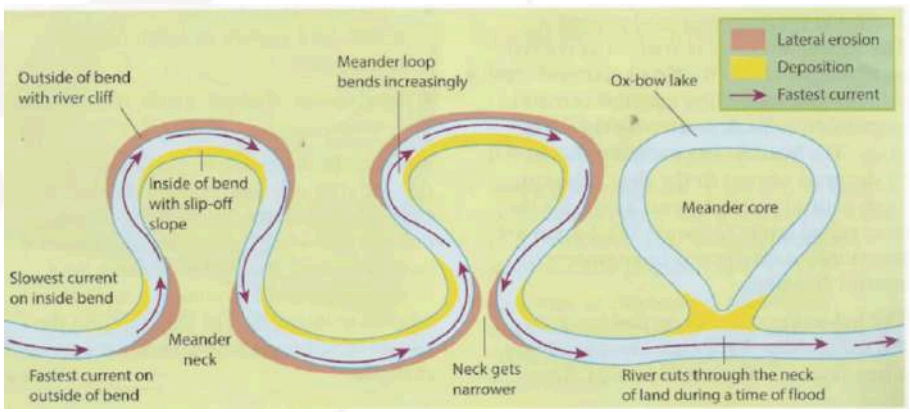
Topic 12 - Bihar's Gogabeel Lake

Syllabus	Indian Geography | Environment
Context	Gogabeel Lake in Bihar has been designated as **India's 94th Ramsar Site**, reflecting its rich biodiversity, ecological value, and importance as a wetland in the Indo-Gangetic basin.
About Gogabeel Lake	❖ A **natural oxbow lake**, formed by the meandering of rivers. ❖ Formed by **Mahananda & Kankhar (north)** and **Ganga (south & east)**. ❖ **57 hectare** Community Reserve + **30 hectare** Conservation Reserve. ❖ Declared **Bihar's first Community Reserve (2019)** under the Wildlife Protection Act, 1972. ❖ Acts as a **seasonal floodplain** connecting nearby rivers during high water levels.
Ecological & Biodiversity Features	❖ Home to **90+ bird species**, including **30 migratory species** (Central Asian Flyway). ❖ Hosts **vulnerable species**: Common Pochard, Lesser Adjutant Stork. ❖ **Near Threatened**: Black-necked Stork, White Ibis, White-eyed Pochard. ❖ Breeding site for the **vulnerable catfish Wallago attu**. ❖ Provides local livelihoods (fishing, grazing, irrigation) but faces **fertilizer-driven ecological stress**.

Oxbow Lakes

❖ An oxbow lake is a U-shaped or crescent-shaped lake formed from an abandoned river meander (bend).

❖ It forms when a river erodes the outside of a sharp bend and deposits sediment on the inside, making the bend larger over time.



Meandering (Related Concept)

❖ Meandering refers to the winding, snake-like curves a river develops instead of following a straight course.

❖ Extremely large meanders can eventually be naturally cut off, leading to the creation of **oxbow lakes**.

SMA, SBL and Ethics

Topic 1 - Rural Education and Youth Migration	
Syllabus	Sociology | Population | Migration
Context	India's growing youth migration from villages to cities reflects deep structural gaps in rural education and employment. Addressing this challenge requires aligning learning with livelihood and making villages engines of opportunity.
Current Migration Scenario	❖ **High Rural Exodus:** 29% of Indians are migrants; 89% originate from rural areas (PLFS 2020–21). ❖ **Youth Migration Dominant:** Over 50% are aged **15–25**, showing massive human capital loss. ❖ **Gender Divide:** 86.8% women migrate for marriage; men migrate for jobs. ❖ **Economic Pattern:** Poorer groups (SCs, OBCs, low MPCE) show higher distress migration. ❖ **Reverse Migration (2020):** 40 million workers returned home, revealing the fragility of urban jobs.
Key Drivers of Migration	❖ **Push Factors** ➢ **Rural Job Crisis:** Limited non-farm employment; 49% migrants are daily wagers. ➢ **Education–Skill Gap:** Degrees lack market relevance; graduate unemployment >15% (CMIE 2024). ➢ **Income Pressure:** Low farm returns and wage stagnation push youth out. ➢ **Weak Infrastructure:** Poor transport, credit, and digital access limit entrepreneurship. ❖ **Urban Pull:** Cities promise income and mobility but deliver insecurity and exploitation.
Consequences of Migration	❖ **Urban Stress:** Overcrowding, slums, and pollution in metro cities. ❖ **Informal Labour Rise:** 88% migrants lack job security or welfare. ❖ **Rural Depopulation:** Youth loss weakens agriculture and local governance. ❖ **Gender Gaps:** Women migrants rarely work; dependency increases. ❖ **Mental Strain:** Family separation causes loneliness and financial anxiety.
Government Interventions	❖ **MGNREGA:** Rural wage security to curb distress migration. ❖ **Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) & PMKVY (Pradhan Mantri Kaushal Vikas Yojana):** Skill training and job-oriented education.

	❖ **PM-MUDRA, Start-Up India, Startup Village Entrepreneurship Programme:** Boost rural entrepreneurship. ❖ **10,000 FPOs Scheme:** Collective farming and agro-value chain expansion. ❖ **BharatNet & Pradhan Mantri Gram Sadak Yojana (PMGSY):** Enhance rural connectivity and digital jobs.
Way Forward	❖ **Link Education with Employment:** Embed **agri-tech, digital & vocational skills** in rural schools. ❖ **Diversify Local Economy:** Promote **handicrafts, logistics, renewables, and agri-tourism.** ❖ **Build Rural Digital Hubs:** Invest in **5G, e-commerce, and telework centres.** ❖ **Encourage Reverse Migration:** Support local role models like **Raigad's Balaram Bandagale.** ❖ **Ensure Portability:** Make **PDS, pensions, and health insurance** universally portable.
Conclusion	Migration must shift from **compulsion to aspiration.** By linking rural education with employability, strengthening local enterprises, and decentralising opportunities, India can transform its villages.

Topic 2 - Environmental Ethics in Indian Philosophy	
Syllabus	Applied Ethics
Context	Indian philosophy treats nature as sacred and interconnected with human consciousness, forming an ethical foundation for sustainable living and ecological balance.
What is it?	❖ A moral framework where **nature = extension of consciousness**, and Protection of the Earth is considered **Dharma** (moral duty).
Key Features	❖ **Holistic worldview:** The **Panchamahabhutas** (five elements) connect human and planetary well-being. ❖ **Moral Stewardship:** Harming nature is viewed as self-harm. ❖ **Ahimsa (Non-violence):** Extending non-violence to all beings and natural elements. ❖ **Spiritual Ecology:** Environmental degradation is a symptom of inner imbalance. ❖ **Sustainability as Spirituality:** Traditional practices (e.g., sacred groves, rainwater harvesting) are rooted in ecological ethics.
Indian Philosophical Approaches	❖ **Vedic–Upanishadic:** Universe seen as one sacred organism (**Ishavasyam** - Rivers, trees, and animals worshipped as divine); Earth as **Mother (Prithvi)**; humans as her children (Mata Bhumih Putro Aham Prithivyah).

	➢ **Ṛta (Cosmic Order)** – Vedic idea of universal law ensuring balance between humans, gods, and nature. ➢ **Dharma** – Duty towards environment; protecting forests, rivers, and animals seen as moral responsibility. ❖ **Ayurveda**: Human health mirrors environmental purity; **soil, water,** and **air** are treated as living entities. ❖ **Jainism:** Ahimsa extended to earth, water, and air; **Aparigraha** promotes restraint and coexistence. ❖ **Buddhism: Pratītyasamutpāda (Dependent Origination)** shows mutual interdependence; compassion guides ecological care. ❖ **Sikhism:** Air = Guru, Water = Father, Earth = Mother; environmental care seen as **Seva** (selfless service).
Western Environmental Ethics	❖ **Deep Ecology:** All beings have intrinsic value; it promotes ecocentric living. ❖ **Utilitarian Environmentalism:** Decisions based on the greatest net human benefit. ❖ **Ecofeminism:** Links the exploitation of nature with the oppression of women; advocates nurturing ethics.
Challenges	❖ Spirituality reduced to eco-marketing. ❖ Urban life is causing a disconnection from nature. ❖ Policies lack moral grounding; they focus on compliance over conscience. ❖ Contradiction between ritual pollution and traditional ecological values. ❖ Ethical dilemma between economic growth and ecological preservation in modern India.
Way Ahead	❖ Teach ecological ethics in education (**Ahimsa, Panchabhuta harmony**). ❖ **Merge Science and Spirituality** in national missions (e.g., Jal Jeevan, Namami Gange, PRANAM). ❖ Empower local communities and religious sites as ecological stewards. ❖ Utilize technology (**AI/GIS**) for protecting sacred natural sites. ❖ Present India's ecological philosophy globally (COP-30, UNESCO).
Conclusion	Indian philosophy sees nature and self as one consciousness. Reuniting this bond makes environmental protection a spiritual journey, guiding India toward compassionate and sustainable development.

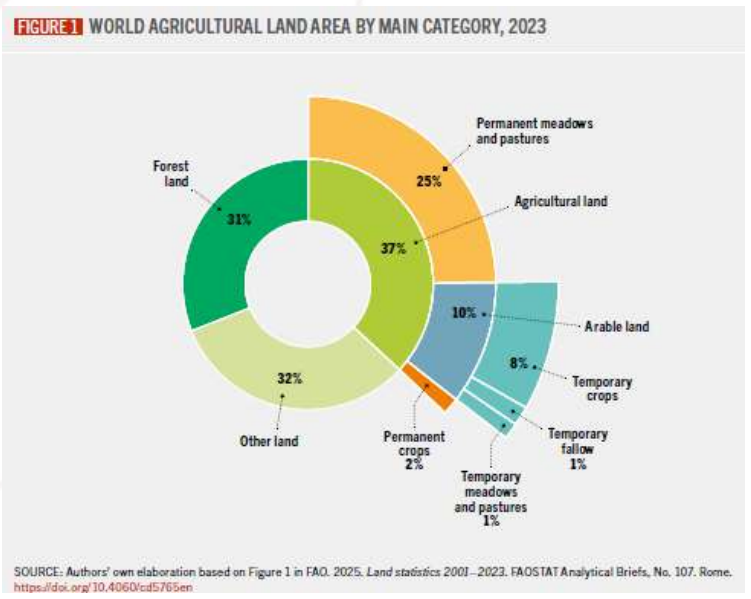
Topic 3 - Gender Gap in Civil Services	
Syllabus	Public Administration | Role of Civil Services in Democracy
Context	UPSC data shows persistent **gender disparity** as women form under 40% of aspirants and transgender participation remains negligible, highlighting structural, social, and institutional barriers to equal representation.
Trends & Data (2010–2021)	❖ **Low Female Participation:** Women's participation increased from 23.4% to 32.98%, but is still below the 40% mark. ❖ **Lower Success Rate:** Only 15.66% of women reached the final merit list in 2021. ❖ **Negligible Transgender Representation:** Only four transgender candidates appeared in 2021, indicating almost zero participation.
Factors Behind Low Representation	❖ **Socio-Cultural Barriers: Patriarchal norms** limit women's autonomy regarding mobility, study time, and career choices. ❖ **Economic Constraints: High costs of coaching** create a barrier for women from rural and low-income backgrounds. ❖ **Safety and Security: Safety concerns** discourage women from relocating to major coaching hubs like Delhi. ❖ **Life-Stage Pressure: Marriage pressure** often disrupts preparation continuity, leading many women to drop out by age 27. ❖ **Institutional Deficiencies:** Lack of adequate support infrastructure, such as hostels, counseling, and mentorship programs.
Drivers of Positive Social Change	❖ **Increased Awareness & Education:** Gradual growth in women aspirants driven by better education and awareness. ❖ **Impact of Role Models:** Inspirational figures are encouraging aspirants from smaller towns (Tier-II/III). ❖ **Government Initiatives:** Schemes aimed at strengthening women's skills contribute to participation. ❖ **Legal Reforms:** Recent legal changes are facilitating transgender inclusion. ❖ **Educational Sensitivity:** The NEP 2020 aims to improve gender sensitivity in the education system.
Importance of Gender-Balanced Civil Services	❖ **Better Governance:** Essential for **inclusive governance** and effective welfare program delivery. ❖ **Improved Outcomes:** Leads to better **health and education outcomes**, especially when women officers are in charge. ❖ **Higher Integrity:** Women officers often exhibit **lower corruption tendencies**. ❖ **Symbolic Value:** Strengthens **symbolic leadership** and enhances social acceptance of women in power. ❖ **Representative Policy:** Ensures **representative decision-making** for policies

	targeting gender-specific needs.
Way Ahead	❖ **Support & Mentorship:** Offer fellowships and structured mentorship programs specifically for women and transgender aspirants. ❖ **Data Transparency:** Mandate the publication of annual UPSC gender-disaggregated data. ❖ **Workplace Flexibility:** Introduce essential support systems like creches, flexible postings, and sabbaticals. ❖ **Infrastructure Expansion:** Increase the number of state-run hostels and coaching centres. ❖ **Cultural Shift:** Promote gender sensitivity through school curricula and media campaigns.
Conclusion	Achieving a gender-diverse civil service is fundamental for **democratic fairness** and the effectiveness of the administrative system. It requires dedicated efforts to ensure equal access, guarantee safety, and build institutional support that accurately reflects India's social composition.

Topic 4 - Transgender Rights in India	
Syllabus	Vulnerable Section
Context	India is advancing legal and welfare provisions for transgender persons amidst increasing global focus on the need for stronger social acceptance, inclusive healthcare, and comprehensive inclusion.
Status and Constitutional Basis	❖ **Demographics:** Census 2011 → **4.87 lakh** self-declared transgender persons (actual numbers likely higher). ❖ **Legal Recognition:** Legally recognized as a **third gender**, affirmed by the **NALSA judgment (2014)**, which established the right to self-identification and mandated affirmative action. ❖ **Constitutional Rights:** Their rights are rooted in fundamental rights: ➢ **Art. 14:** Right to Equality. ➢ **Art. 15 & 16:** Prohibition of discrimination based on sex, interpreted to include gender identity. ➢ **Art. 19:** Freedom of expression, encompassing gender identity. ➢ **Art. 21:** Right to dignity, autonomy, health, and privacy.
Key Initiatives and Legislation	❖ **The Transgender Persons (Protection of Rights) Act, 2019:** Provides legal recognition, prohibits discrimination, defines offences, and mandates inclusive education. ❖ **Rules (2020):** Facilitated implementation with simplified certification, and the establishment of Welfare Boards and Protection Cells.

	❖ **National Council for Transgender Persons (NCTP):** Advises on policy and handles grievances. ❖ **National Portal (2020):** A digital platform for accessing Self-ID certificates, ID cards, and government schemes. ❖ **SMILE Scheme (2022):** Comprehensive support for Marginalised Individuals, focusing on Livelihood and Enterprise. Key components include: ➢ Scholarships and skill development. ➢ **Ayushman Bharat TG Plus:** Health insurance coverage. ➢ Garima Greh shelters. ❖ **Equal Opportunity Policy:** Promotes inclusive hiring in both public and private sectors.
Major Challenges	❖ **Social & Personal:** High levels of **social stigma and violence** leading to exclusion from family, education, and employment. ❖ **Economic: L**ow formal employment rates, and reliance on unsafe livelihoods. ❖ **Healthcare barriers:** Lack of trained professionals, high costs, and limited insurance coverage. ❖ **Implementation & Bureaucracy:** Inconsistent processes for updating gender in **documentation**, and scheme effectiveness is hindered by **low funding** and weak outreach. ❖ **Housing:** Pervasive **housing insecurity**, discrimination, and inadequate shelter options.
Recommendations for the Future	❖ **Strengthen Implementation:** Ensure vigorous **enforcement of the 2019 Act and 2020 Rules** by operationalizing welfare boards and protection cells. ❖ **Expand Healthcare: Expand the TG Plus healthcare scheme** to cover gender-affirming care (surgeries, hormone therapy, counselling) in government hospitals. ❖ **Capacity Building: Integrate transgender healthcare into medical curricula** and provide specialized training to healthcare providers. ❖ **Centres of Excellence: Establish dedicated Centres of Excellence** for gender-affirming care to boost accessibility and potentially medical tourism. ❖ **Resource Allocation: Increase funding and develop a robust national strategy** for livelihood, housing, and health support. ❖ **Legal & Administrative Reform: Simplify documentation processes** and strengthen anti-discrimination laws to ensure full and effective social inclusion.
Conclusion	India is poised to translate legislative rights into tangible, **real equality** for transgender persons through committed implementation, comprehensive and inclusive healthcare services, strengthened social protection mechanisms, and a focus on ensuring fundamental dignity for all.

Miscellaneous

Topic 1 - The State of Food and Agriculture	
Syllabus	Agriculture
Context	The Food and Agriculture Organization (FAO's) 2025 flagship report warns that human-induced land degradation is reducing global cropland productivity, deepening yield gaps, and threatening food security - especially for smallholders.
About the Report	❖ **Annual flagship report** published by the **Food and Agriculture Organization (FAO)**. ❖ Provides **evidence-based analysis** on key global agricultural and food system issues. ❖ **2025 Theme**: Addressing land degradation across landholding scales. ❖ Focus: Land degradation and its impacts on agriculture productivity, livelihoods, and sustainability.
Key Trends Identified	❖ **20% cropland degrading:** 20% of global cropland shows **declining productivity** due to human-induced degradation (agricultural expansion). ❖ **Yield gaps up to 70%:** Difference between potential and actual yields - Worst in South Asia & Sub-Saharan Africa. ❖ **Soil carbon decline:** Reduces water retention & resilience to climate shocks. ❖ **Vulnerability by Farm Size:** ➢ **Smallholders:** 84% of farms hold only 12% of the land and are highly vulnerable due to limited access to finance and technology. ➢ **Large Farms:** The top 1% of farms, which hold 70% of the land, face degradation from practices like monocropping and excessive fertilizer use. ❖ **Climate–degradation link:** Degraded soils release CO_2, undermining the achievement of **SDG 15.3** (Land Degradation Neutrality). 
Analytical Innovations and Quantified Impact	❖ **Degradation Debt Model:** ML-based tool shows 30% tree cover & 20% biomass carbon loss. ❖ **Economic loss quantified:** Global degradation costs ≈ USD 300 billion annually. ❖ **Yield gap correlation:** 10% rise in degradation → 2% wider yield gaps.

	❖ **Scale-sensitive (targeted) policies:** GAEZ v5 database enables tailored interventions for farm sizes.
Gaps / Failures	❖ **Monitoring Weakness:** Poor satellite and technical monitoring capacity in low-income countries. ❖ **Fragmented Finance:** Restoration funding is inconsistent and poorly coordinated. ❖ **Policy Silos:** Limited integration of land degradation efforts with climate and livelihood goals (**SDG 13** and **SDG 8**). ❖ **Exclusion of Traditional Knowledge:** Indigenous and traditional farming systems are underutilized in policy frameworks.
FAO Re commendations	The FAO advocates for an **Avoid → Reduce → Reverse** policy hierarchy for land degradation, centered on science, technology, and innovation (STI) for resilient, inclusive, and sustainable food systems. ❖ **Scale-Sensitive Policies:** Implement Payments for Ecosystem Services (PES) for smallholders and regulate input use on large commercial farms. ❖ **Financial Mobilization:** Boost restoration finance by promoting practices like carbon farming and regenerative agriculture. ❖ **Empowerment and Inclusion:** Empower local communities and promote gender-inclusive, community-led models. ❖ **Strengthen Monitoring:** Establish a Global Land Degradation Data Hub for real-time tracking. ❖ **SDG Integration:** Align land policies with **SDG 2 (Zero hunger)**, **SDG 13 (Climate Action)**, and **SDG 15 (Life on Land)**.
Conclusion	FAO 2025 warns that degradation threatens one-fifth of global cropland and widens yield gaps. Urgent, science-backed, and equitable restoration measures are essential to safeguard global food security and achieve climate goals before 2030.

Topic 2 - Global TB Report 2025	
Syllabus	Reports | Health
Context	The **Global TB Report 2025** shows steady global progress but confirms that **India still carries the world's highest TB burden**, despite significant reductions in incidence and mortality.
About the Global TB Report 2025	❖ **What it is:** Annual WHO assessment of TB trends and progress. ❖ **Aim:** Track **WHO End TB Strategy (2015–2035)** goals (90% death reduction, 80% incidence reduction by 2030).
Global Trends	❖ **Incidence Decline:** Global TB incidence down 1.7% (2023–24). ❖ **Burden Concentration:** SE Asia (34%), Western Pacific (27%), Africa (25%).

- ❖ **High-Burden Nations: India (25%)** > Indonesia (10%) > Philippines (6.8%) > China (6.5%).
- ❖ **Drug Resistance:** MDR-TB is a continuing threat with slow progress (~500,000 new DR-TB cases annually).

India-Specific Performance (2015–2024)

India has made notable strides but remains a major global contributor:

Metric	2015	2024 (Latest)	Progress	Global Contribution
Incidence (per 100,000)	237	187	21% decrease	**25%** of global **cases**
Mortality (per 100,000)	28	21	Significant reduction, but still above the 3/100k target	**28%** of global **deaths**
Drug-Resistant TB	-	-	Slow progress	32% of global **DR-TB**
Case Detection	-	2.61M diagnosed (out of an estimated 2.7M)	High	
Treatment Coverage	53%	92%	Significant increase	Policy gains like **Ni-kshay 2.0** and **TB-Mukt Bharat** have driven the high case detection and treatment coverage

Initiatives to Reduce TB

Global	India
❖ **WHO End TB Strategy (2015–2035)** ➢ Targets: **90%** reduction in TB **deaths** and **80%** reduction in **incidence** by 2030. ❖ **Global Fund to Fight AIDS, TB, and Malaria** ➢ Provides billions in funding for TB programs, especially in high-burden countries. ❖ **UN High-Level Meetings:** Commitments for funding, vaccines, and universal care. ❖ **Stop TB Partnership**: Community Involvement. ❖ **WHO Guidelines (2024–25):** Updated diagnostics and MDR-TB protocols.	❖ **National Strategic Plan for TB Elimination (2017–2025):** Targeted TB **elimination by 2025** (five years ahead of UN SDG 2030). ❖ **Ni-Kshay Portal & Ni-Kshay Mitra Scheme** ➢ Digital platform for TB patient tracking. ➢ Community and corporate adoption of TB patients for nutritional and social support. ❖ **Nikshay Poshan Yojana** ➢ ₹1000 monthly nutritional support to TB patients during treatment. ❖ **PM TB Mukt Bharat Abhiyan** ➢ Awareness campaigns and door-to-door screening. ❖ **Diagnostics:** CBNAAT, TrueNat, and AI-based screening expanded nationwide.

Topic 3 - Poorvi Prachand Prahar – Tri-Service Exercise	
Syllabus	Defence | Military Exercise
Context	This tri-service exercise in **Mechuka, Arunachal Pradesh**, strengthens India's joint warfighting capability, especially in high-altitude zones near the LAC, enhancing preparedness against evolving threats.
What is Poorvi Prachand Prahar?	❖ A large-scale **joint tri-service exercise** of the Army, Navy & Air Force under Eastern Command. ❖ Conducted in **Mechuka, Arunachal Pradesh**, close to the LAC. ❖ Focuses on validating multi-domain operations in high-altitude terrain. ❖ **Aim** ➢ Enhance interoperability across land, air, and maritime domains. ➢ Test revised joint doctrines and fast-response tactics. ➢ Strengthen combat agility in high-altitude environments. ❖ **Key Features** ➢ **New Light Formations:** First use of "Save and Raise" combat units with no extra fiscal load. ➢ **Continuity:** Follows earlier tri-service drills, such as Bhala Prahar (2023) & Poorvi Prahar (2024).

Topic 4 - Operation Trishul	
Syllabus	Science & Technology | Defence
Context	India has launched **Operation Trishul**, a massive **tri-services military exercise** near the **Sir Creek region**, as Pakistan issues NOTAM restricting its airspace - signaling heightened regional readiness.
About Operation Trishul	❖ **What it is:** A large-scale **joint military exercise** involving the **Army, Navy, and Air Force** to test integrated combat readiness across **land, air, sea, cyber, and space domains**. ❖ **Launched by: Ministry of Defence, Government of India**. ❖ Conducted in **Rajasthan and Gujarat**, especially around **Sir Creek, Rann of Kutch**, and the **Saurashtra coast**. ❖ Focus on **desert warfare, amphibious operations**, and **coastal defence drills**.
Objectives	❖ Validate **joint combat operations** under realistic war-like conditions. ❖ Strengthen **deterrence along the western frontier**.

	❖ Demonstrate **Atmanirbhar Bharat** by deploying **indigenous systems and AI-based technologies**. ❖ Prepare for **multi-front and hybrid threats**.
Key Features	❖ **Massive participation:** 20,000+ troops, **Rafale & Sukhoi-30 MKI**, **S-400 systems**, **MBTs**, and **howitzers**. ❖ **Sub-exercises:** ➢ **Trinetra** – Electronic warfare & counter-drone ops. ➢ **Mahagujraj** – Integrated air operations. ❖ **Naval strength:** Frigates, destroyers & amphibious units securing **Jamnagar** and offshore installations. ❖ **Tech-driven warfare:** Use of **indigenous drones, ISR systems**, and **AI-enabled command networks**.

Topic 5 - Exercise Malabar 2025

Syllabus	Security | Defence
Context	Exercise Malabar 2025, held in **Guam**, strengthens **Quad naval cooperation**, showcasing India's commitment to maritime security, interoperability, and a stable Indo-Pacific.
What is Exercise Malabar?	❖ Exercise Malabar is a **multilateral naval exercise** involving the **Quad members**: **India**, **US**, **Japan**, and **Australia**. ❖ Its primary goal is to strengthen **Quad naval cooperation**, enhance maritime security coordination, and improve joint operational capabilities in the Indo-Pacific. ❖ **History and Evolution**: ➢ **Origin:** Malabar began in **1992** as a bilateral exercise between **India and the US**. ➢ **Expansion:** ■ **Japan** became a permanent participant in **2015**. ■ **Australia** joined in **2020**, completing the full Quad participation. ➢ **Development:** The exercise has evolved from basic drills to highly advanced joint operations, with hosting responsibilities rotated among the Quad nations. ❖ **Malabar 2025**: November 10–18, 2025 ➢ The 2025 edition is scheduled to be held in **Guam**, a U.S. Pacific territory. ➢ It will feature both **harbour phase** and **sea phase** activities.

Topic 6 - ICA World Cooperative Monitor 2025

Syllabus	Report & Indices
Context	India has achieved a historic milestone as **Amul (GCMMF)** and **IFFCO** secured the top two global ranks in the **ICA World Cooperative Monitor 2025**, showcasing India's cooperative strength under the vision of "Sahkar Se Samriddhi."
About the ICA World Cooperative Monitor (WCM)	❖ **What it is:** ➢ Annual global report analysing the **economic and social performance** of the world's largest cooperatives and mutuals. ➢ Assesses **economic weight, employment impact, and social contribution** of cooperatives. ➢ Highlights the cooperatives' role in **inclusive growth** and **sustainable development.** ❖ **Published by: International Cooperative Alliance (ICA)** (Brussels) & **EURICSE** (European Research Institute on Cooperative and Social Enterprises). ❖ **Ranking Criteria**: Two primary lists ➢ **Absolute Turnover** (Economic contribution). ➢ **Turnover relative to GDP per capita** (Socio-Economic Contribution/Member Impact). ❖ **First Released:** 2012 - provides **comparative data for 10+ years** of global cooperative performance.

Rankings by Turnover over GDP per Capita. TURNOVER/GDP PER CAPITA: TOP 10

Rank 2023	Organisation	Country	Economic Activity	Type	Turnover/GDP per capita 2023	Number of Employees 2023	FTE or Headcount
1	Gujarat Cooperative Milk Marketing Federation Ltd (AMUL)	India		Producer	2,899,260	1,600	Headcount
2	IFFCO	India		Producer	2,555,994	4,454	Headcount
3	Groupe Crédit Agricole	France		Consumer/ User	2,403,513	145,000	Headcount
4	Sistema Unimed	Brazil		Worker	1,898,376	146,761	Headcount
5	Groupe BPCE	France		Consumer/ User	1,853,431	97,835	FTE

Your Notes

Focus on Answer Writing

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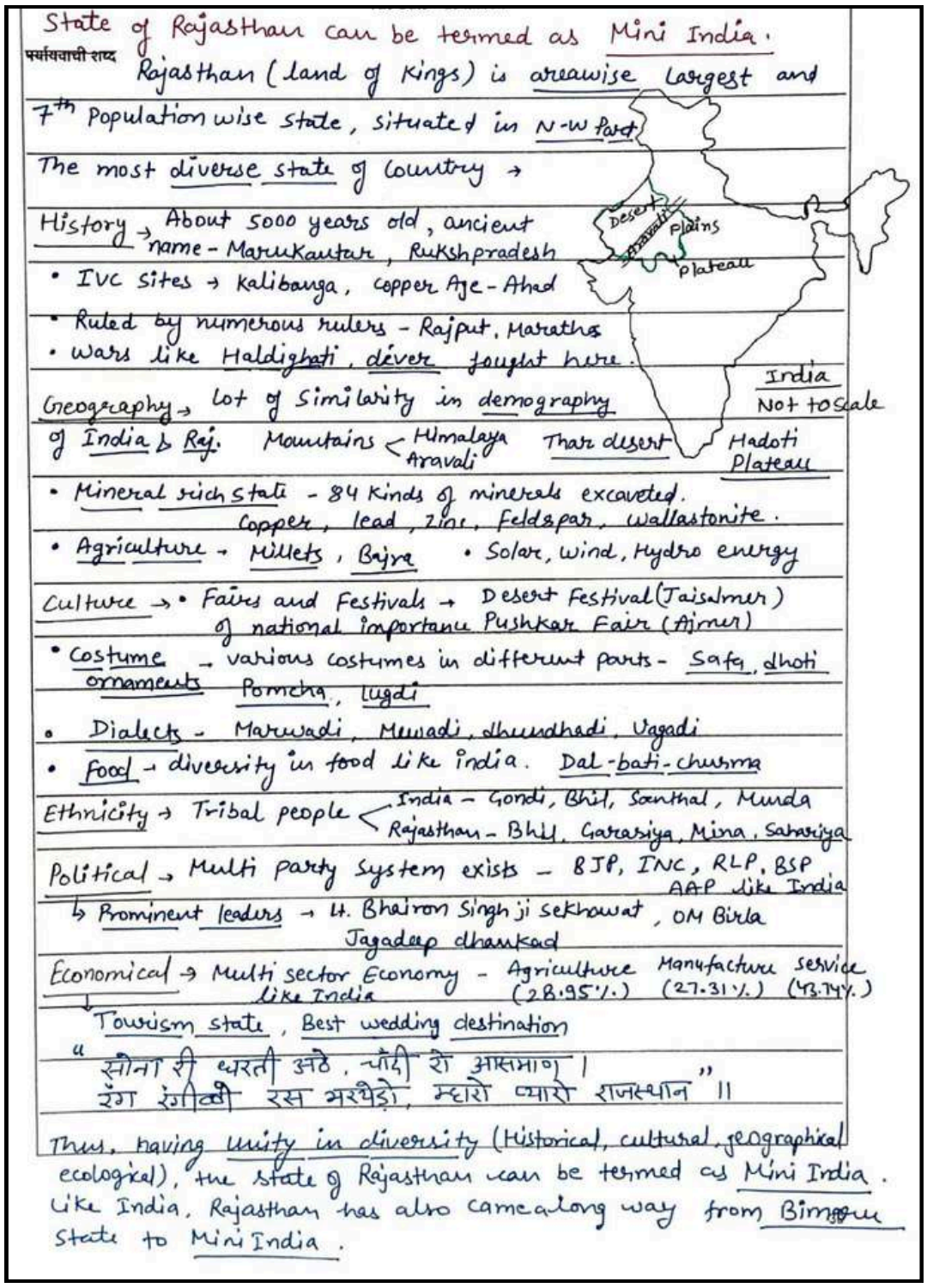


State of Rajasthan can be termed as Mini India.

पर्यायवाची शब्द

Rajasthan (land of Kings) is areawise Largest and 7th Population wise state, situated in N-W Part

The most diverse state of Country →

History → About 5000 years old, ancient name - Marukantar, Rukshpradesh
- IVC sites → Kalibanga, copper Age - Ahad
- Ruled by numerous rulers - Rajput, Marathas
- wars like Haldighati, dever fought here.

Geography → lot of Similarity in demography of India & Raj. Mountains < Himalaya Aravali, Thar desert, Hadoti Plateau

- Mineral rich stati - 84 Kinds of minerals excavated. Copper, lead, zinc, Feldspar, wallastonite.
- Agriculture → Millets, Bajra
- Solar, wind, Hydro energy

Culture →
- Fairs and Festivals → Desert Festival (Jaisalmer) of national importance Pushkar Fair (Ajmer)
- Costume → various costumes in different parts - Safa, dhoti ornaments Pomcha, Lugdi
- Dialects - Marwadi, Mewadi, dhundhadi, Vagadi
- Food - diversity in food like india. Dal-bati-churma

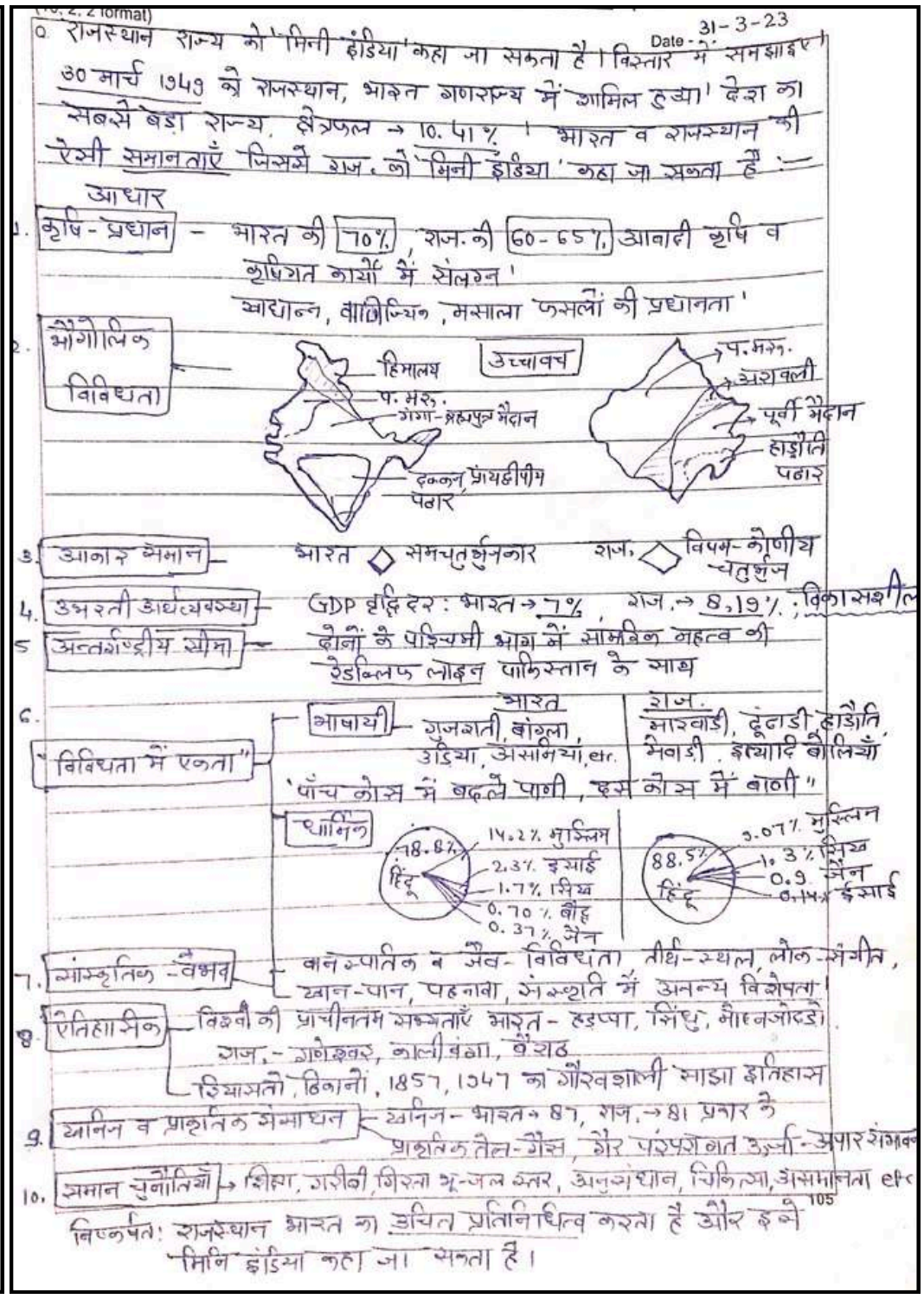
Ethnicity → Tribal people < India - Gondi, Bhil, Santhal, Munda; Rajasthan - Bhil, Garasiya, Mina, Sahariya

Political → Multi party System exists - BJP, INC, RLP, BSP, AAP like India
↳ Prominent leaders → H. Bhairon Singh ji sekhawat, OM Birla, Jagadeep dhankad

Economical → Multi sector Economy - Agriculture (28.95%), Manufacture (27.31%), service (43.74%) like India
↳ Tourism state, Best wedding destination

" सोना री धरती अठे, चाँदी रो आसमाण।
रंग रंगीली रस भरयेड़ो, म्हारो प्यारो राजस्थान "

Thus, having unity in diversity (Historical, cultural, geographical ecological), the state of Rajasthan can be termed as Mini India. Like India, Rajasthan has also came along way from Bimaru State to Mini India.



Date - 31-3-23

Q. राजस्थान राज्य को 'मिनी इंडिया' कहा जा सकता है। विस्तार में समझाइए।

30 मार्च 1949 को राजस्थान, भारत गणराज्य में शामिल हुआ। देश का सबसे बड़ा राज्य, क्षेत्रफल → 10.41%। भारत व राजस्थान की ऐसी समानताएँ जिससे राज. को 'मिनी इंडिया' कहा जा सकता है :—

1. कृषि - प्रधान — आधार — भारत की 70%, राज. की 60-65% आबादी कृषि व कृषिगत कार्यों में संलग्न। चावल, बाजरा, मसाला फसलों की प्रधानता।
2. भौगोलिक विविधता — हिमालय, उच्चावच, प.मरु., गंगा-ब्रह्मपुत्र मैदान, दक्कन प्रायद्वीपीय पठार, अरावली, पूर्वी मैदान, हाड़ौती पठार
3. आकार में समान — भारत ◇ समचतुर्भुजनुमा, राज. ◇ विषम-कोणीय चतुर्भुज
4. उभरती अर्थव्यवस्था — GDP वृद्धि दर: भारत → 7%, राज. → 8.19%; विकासशील
5. अन्तर्राष्ट्रीय सीमा — दोनों के पश्चिमी भाग में सामरिक महत्व की रेडक्लिफ लाइन पाकिस्तान के साथ
6. "विविधता में एकता" — भारत / राज.
   - भाषायी — गुजराती, बांग्ला, उड़िया, असमिया, etc. / मारवाड़ी, ढूंढाड़ी, हाड़ौती, मेवाड़ी, इत्यादि बोलियाँ
   - "पाँच कोस में बदले पानी, दस कोस में बानी"
   - धार्मिक — हिंदू 88.5%, मुस्लिम 9.07%, सिख 1.3%, जैन 0.9, ईसाई 0.14% / हिंदू 78.8%, मुस्लिम 14.2%, ईसाई 2.3%, सिख 1.7%, बौद्ध 0.70%, जैन 0.37%
7. सांस्कृतिक वैभव — वनस्पतिक व जैव-विविधता, तीर्थ-स्थल, लोक-संगीत, खान-पान, पहनावा, संस्कृति में अनन्य विशेषता
8. ऐतिहासिक — विश्व की प्राचीनतम सभ्यताएँ भारत - हड़प्पा, सिंधु, मोहनजोदड़ो। राज. - गणेश्वर, कालीबंगा, बैराठ। रियासतों, ठिकानों, 1857, 1947 का गौरवशाली साझा इतिहास
9. खनिज व प्राकृतिक संसाधन — खनिज - भारत → 87, राज. → 81 प्रकार के प्राकृतिक तेल-गैस, गैर परंपरागत ऊर्जा - अपार संभावना
10. समान चुनौतियाँ → शिक्षा, गरीबी, गिरता भू-जल स्तर, अनुसंधान, चिकित्सा, असमानता etc

निष्कर्षतः राजस्थान भारत का उचित प्रतिनिधित्व करता है और इसे मिनि इंडिया कहा जा सकता है।

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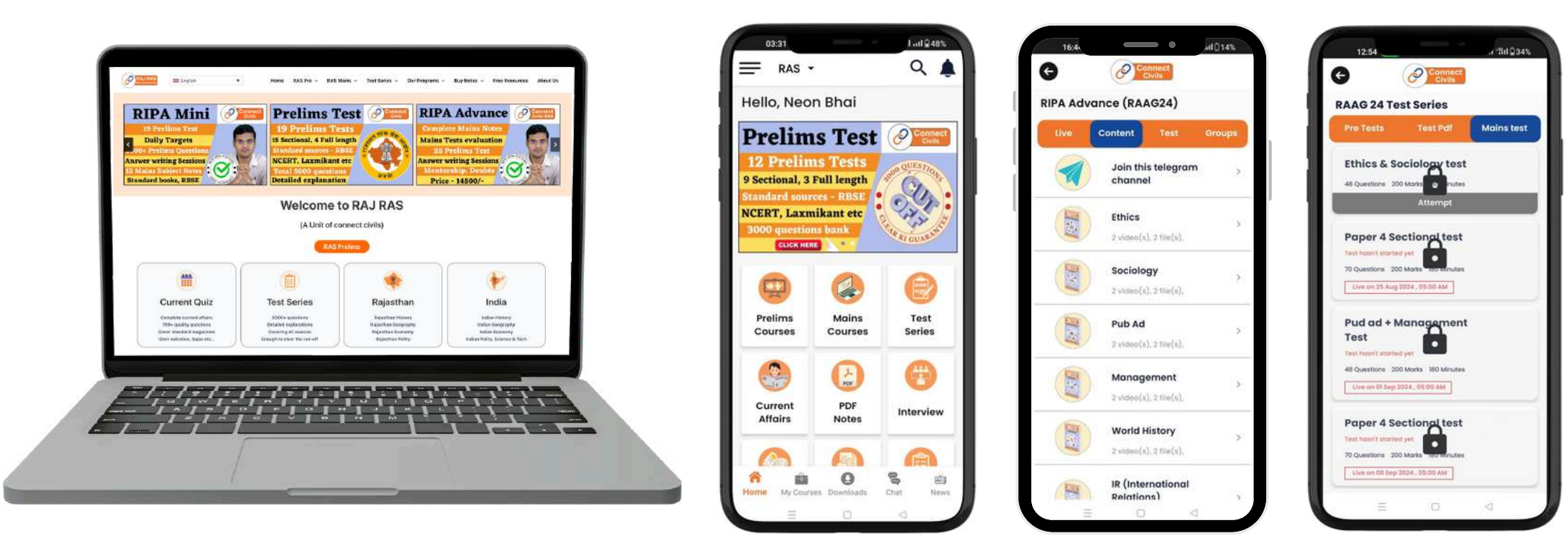
Free content and answer writing on website and App



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Study Material

Complete coverage of RBSE/NCERT/IGNOU/NIOS

Smart Strategy - Budget, Eco survey, PYQs analysis

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