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**This Document was prepared under the supervision of Mr. Pramod Singh, Director, Edge IAS.**

**Current Affairs, August 2023**

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# 1. Polity and Governance

## 1.1 Government of National Capital Territory of Delhi (Amendment) Bill, 2023

The Government of National Capital Territory of Delhi (Amendment) Bill, 2023, was introduced in the Lok Sabha, leading to opposition protests and debates.

### About the Bill:

The bill aimed to replace the National Capital Territory of Delhi (Amendment) Ordinance, 2023, which deals with the control of services in Delhi.

### Background of the Issue:

- The Delhi government and Lieutenant Governor have been in a legal battle since 2015 over control of “services” in Delhi. The Supreme Court gave a split verdict in 2019, and a five-judge Constitution Bench recently (May 2023) granted more powers to the Delhi government over services. It ordered that the Delhi government will have control over administrative services other than matters related to public order, police, and land.
- To counter it, the central government passed the National Capital Territory of Delhi (Amendment) Ordinance, 2023. The ordinance excluded “services” from the purview of the Delhi legislature and conferred LG with more powers. It will now be replaced by the Government of National Capital Territory of Delhi (Amendment) Bill, 2023.

### How UTs are administered?

- The Union Territories (UTs) in India are administered by the President through an appointed administrator, who represents the President and exercises administrative powers in the UT. In some UTs, such as Delhi and Puducherry, the administrator holds significant powers, including the ability to make laws and regulations for the UT, while in others, the administrator’s powers are limited to providing advice to the elected government.

### Special provision for Delhi UT:

- Special provisions have been made for certain UTs, such as Puducherry, Delhi, and Jammu and Kashmir (yet to be constituted), which have a legislative assembly and a Council of Ministers headed by a Chief Minister. The legislative assembly of these UTs has the power to make laws with respect to matters enumerated in List II or List III in the Seventh Schedule of the Constitution insofar as these matters are applicable in relation to the UT.
- However, some entries in List II, such as public order, police, and land, are not within the legislative competence of the legislative assembly of Delhi.

## 1.2 Constitutional Challenge to the 2019 Abrogation of Article 370

The Supreme Court began hearings on the constitutional challenge to the 2019 abrogation of Article 370, which granted special status to Jammu and Kashmir.

### What is Article 370?

- Article 370 was a provision in the Indian Constitution that granted special autonomy and privileges to the state of Jammu and Kashmir. It allowed the state to have its own constitution, flag, and autonomy over most matters except foreign affairs, defence, and communications. This article was abrogated in 2019, revoking the special status of Jammu and Kashmir and integrating it fully into the Indian Union.

### Why was Article 370 abrogated in 2019?

- Article 370 was abrogated in 2019 to fully integrate the state of Jammu and Kashmir into the Indian Union and remove its special autonomy. The Indian government stated that this move aimed to promote economic development, better governance, and equal rights for all citizens across the region, while critics expressed concerns about the potential erosion of cultural and political distinctiveness.

### The present argument in the Supreme Court regarding Article 370:

- Article 370 is part of the Constitution’s “Temporary, Transitional and Special Provisions” section and is titled “Temporary provisions with respect to the State of Jammu and Kashmir”. The provision outlines that the President can declare it inoperative, making it commonly seen as temporary. However, the petitioners argue that its temporary nature is due to the Jammu and Kashmir Constituent Assembly’s role (1951-1957) in recommending changes to it. Once the Constituent Assembly ceased to exist in 1957, the provision was argued to have become a permanent feature.
- The central question that SC will decide is whether Parliament has the power to abrogate Article 370 after 1957 when the Constituent Assembly was no longer in existence.

### The argument for favour and Against:

Arguments in Favor of Removing Article 370	Arguments Against Removing Article 370
<b>Temporary Provision:</b> Article 370 is titled “Temporary provisions with respect to the State of Jammu and Kashmir”. This suggests it wasn’t meant to be permanent.	<b>Original Agreement:</b> The accession of Jammu & Kashmir to India was based on certain terms, with <b>Article 370 being central</b> .
<b>Self-contained Exit:</b> Article 370(3) allows for the <b>President to declare the article inoperative</b> , indicating a mechanism for its removal.	<b>“Temporary” Misunderstood:</b> The term “temporary” in Article 370 refers to the period before J&K’s Constituent Assembly created its Constitution (1951-1957), not the Article’s lifespan.
<b>Uniformity:</b> Removal can lead to the uniform application of Indian laws to Jammu & Kashmir, integrating it fully with India.	<b>Constituent Assembly’s Role:</b> Clause (3) of Article 370 mandated that any change to the relationship between J&K and India <b>needed the J&amp;K Constituent Assembly’s recommendation</b> .
<b>Development &amp; Growth:</b> Some believe removal can boost the region’s development, as it would get equal attention and opportunities like other states.	<b>End of Constituent Assembly:</b> Since the Constituent Assembly ceased to exist after 1957, the power to alter <b>Article 370 also ended, making the Article permanent</b> .
	<b>Preservation of Identity:</b> Article 370 ensured J&K maintained its unique identity and relationship with India.

### 1.3 “Limited Internet shutdowns” and their impact

The idea of “limited internet shutdowns” is gaining traction as a way to control riots and security threats while allowing beneficial use of the internet. However, there is no study by the Indian government or any state government to assess the effectiveness of these shutdowns.

#### What is “Limited internet shutdowns”?

- It refers to the intentional restriction or blocking of access to the internet, often specific websites or online services, within a defined geographic area or for a specified period of time. This is done as a response to

security threats, social unrest, or public emergencies, with the aim of controlling the flow of information and communication.

#### Status of India on Internet shutdown:

- According to a report by Access Now and the KeepItOn coalition, India enforced as many as 84 internet shutdowns in 2022 and was on top of the list for the fifth year in a row.
- In 2022, the Internet was shut down 49 times in Jammu and Kashmir, the highest of any state in the country.

#### Constitutional Articles & Internet Shutdown:

- Internet-related rights are protected by Articles 19(1)(a) (freedom of speech and expression) and 19(1)(g) (freedom of trade and commerce).
- Exceptions: Restrictions on these rights should follow the guidelines of Articles 19(2) and (6) and adhere to the principle of proportionality.
- Proportionality Test: It assesses whether governmental actions justifiably infringe on individual rights.

#### Legal ground:

- Internet shutdown orders are regulated by the Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017, which fall under the Indian Telegraph Act, 1885. These rules allow for the temporary suspension of telecom services in a specific area during public emergencies.
- Senior officials from the Home Ministry at both central and state levels are authorized to issue shutdown orders.

#### SC Judgment & Amendments on Internet Shutdown:

- In *Anuradha Bhasin vs Union of India (2020)*, SC stated indefinite internet shutdowns are illegal, requiring necessity and proportionality.
- The Union govt amended 2017 Rules in Nov 2020, capping shutdowns at 15 days.
- In Dec 2021, the Standing Committee on Communication and IT proposed further amendments.
- The committee suggested a comprehensive review of Rules, technology-oriented changes, and uniform guidelines for states/UTs to minimize public disruption.

#### Impact of Internet shutdown:

Impact of Internet Shutdowns	Examples
Communication Disruption	A recently released <a href="#">United Nations-backed report (by OHCHR)</a> has highlighted that <b>shutting down the internet affects people's safety &amp; well-being</b> , hampers information flow and harms the economy
	Businesses are unable to conduct online transactions, affecting e-commerce and communication with clients.
Information Flow Disruption	Limited access to news websites, hindering access to timely and accurate information.
	Inability to access educational resources, affecting students' learning during shutdowns.
Economic Impact	Loss of revenue for businesses relying on online operations and services.
	Impediments to remote work, affecting productivity and economic activity.



<b>Social and Political Impact</b>	Inability to organize protests or rallies via social media, affecting freedom of expression and assembly.
	Government control over information flow during sensitive events, limits public awareness.
<b>Human Rights Concerns</b>	Violation of freedom of speech and expression, undermining democratic values.
	Infringement on the right to access information crucial for making informed decisions.
<b>Educational Disruption</b>	Students unable to attend online classes, disrupt education during shutdowns.
	Lack of access to online educational resources and platforms.
<b>Healthcare and Emergency Impact</b>	Impaired access to telemedicine services and health information during critical times.
	Delays in accessing emergency services or assistance due to disrupted communication.
<b>Global Perception</b>	Negative impact on a country's image, raising concerns about digital rights and freedom.
	International criticism for hindering access to information and communication.

**Addressing internet shutdowns requires a balanced approach that respects security and rights:**

- Adhere to Legal Standards: Follow clear legal grounds and constitutional principles of necessity and proportionality.
- Transparency: Provide transparent justifications for shutdowns and hold authorities accountable.
- Limited Measures: Use specific, time-bound shutdowns; avoid blanket measures.
- Alternatives: Consider content removal or service restrictions instead of full shutdowns.
- Judicial Oversight: Ensure judicial review, preventing misuse as seen in Anuradha Bhasin case.
- Stakeholder Engagement: Collaborate with civil society, businesses, and experts for balanced guidelines.
- Digital Literacy: Educate citizens about rights, safe practices, and shutdown consequences.

**UN's OHCHR Recommendations**

- Stop imposing Internet shutdowns: It may be the last recourse but should be used rarely for legitimate reasons
- Legitimate shutdown: Need to control the spread of hate speech, disinformation or other forms of content deemed illegal or harmful
- Clear policies: There should be an unambiguous, publicly available and legitimate policy for any shutdown
- Internet companies should engage and collaborate with stakeholders including government and civil society to prevent such disruption

**1.4 Lowering the Minimum Age for Contesting Election**

A Parliamentary panel has suggested lowering the minimum age for contesting in Assembly elections from 25 years to 18 years.



Benefits of Lowering Minimum Age	Description
<b>1. Youth Representation:</b> This allows young individuals to participate actively in the political process and bring fresh perspectives to policy discussions.	In countries like <b>Canada, where the minimum age for candidacy in federal elections is 18</b> , young leaders like <b>Pierre-Luc Dusseault</b> were elected to the House of Commons at a young age.
<b>2. Enhanced Political Engagement:</b> Encourages political awareness and involvement among youth, contributing to a more engaged and informed citizenry.	The success of <b>youth-led movements such as “March for Our Lives”</b> in the United States demonstrates the political activism and engagement of young people.
<b>3. Diverse Leadership:</b> Promotes diversity in leadership by allowing representation from different age groups, backgrounds, and experiences.	Young youth leaders will bring new energy and momentum to the parliamentary system.
<b>4. Adaptation to Modern Challenges:</b> Acknowledges that young candidates may have insights into contemporary issues like technology, climate change, and social justice.	The committee pointed out that surveys show significant political awareness and knowledge among youth globally.

#### Drawbacks of Lowering Minimum Age:

Drawbacks	Examples
<b>1. Lack of Experience</b>	Young candidates might lack the experience and maturity required for effective decision-making and governance.
<b>2. Limited Understanding</b>	Young candidates may have a limited understanding of the complexities of governance and public policy.
<b>3. Vulnerability to Influence</b>	Young candidates might be more susceptible to external influence, as they may have less exposure to political dynamics.
<b>4. Inadequate Preparedness</b>	Lowering the age might lead to unprepared candidates entering the political arena, resulting in ineffective representation.

#### Election Commission’s view:

- The Election Commission disagreed with the proposal, stating that 18-year-olds might lack the necessary experience and maturity for such responsibilities.

#### Other proposals discussed by the committee:

- **Common Electoral Rolls:** The committee discussed the concept of a common electoral roll for different types of elections but urged caution, emphasizing the importance of maintaining the principles of federalism.
- Currently, some states utilize the Election Commission’s electoral rolls, while others do not
- Implementing a common electoral roll, as proposed by the central government and ECI, is presently outside the scope of Article 325.
- The committee expressed concern about the potential impact of a common roll on state powers listed under Chapters IX and IX A of the constitution.
- **Aadhaar and Voter ID linking:** The committee expressed concerns about linking the Aadhaar and Voter IDs

of non-citizens, suggesting the establishment of legal provisions to ensure non-citizens with Aadhaar are not included on electoral rolls.

- Remote voting: The committee invited comments from political parties on Election Commission’s proposal for remote voting for internal migrants

**Recommendations by the committee:**

- False declaration during nominations: The panel recommended increasing the punishment for filing a false affidavit from six months to up to two years, depending on the severity of the offence.
- Section 125A of the Representation of People Act of 1951, deals with the penalties for providing false information.

**1.5 National Nursing and Midwifery Commission (NNMC) Bill, 2023**

The Parliament has approved the National Nursing and Midwifery Commission (NNMC) Bill, 2023, a significant legislative reform aimed at revolutionizing the nursing education and practice sector.

**Objectives:**

- This bill will replace the existing Indian Nursing Council with a modern regulatory structure.
- Repeal the existing Indian Nursing Council Act, of 1947, as the act is outdated and does not reflect the current needs and demands
- It will aim to enhance standards, professionalism, transparency, and accountability in the nursing field.

**What is Nursing and Midwifery?**

- Nursing involves providing healthcare services, monitoring patients, administering treatments, and assisting doctors. Midwifery specifically focuses on providing care to pregnant women before, during, and after childbirth, as well as newborn care. Both roles are critical in healthcare systems.

**Key highlights of the proposed National Nursing and Midwifery Commission (NNMC) Act, 2023**

Highlight	Description
<b>Establishment of Commissions</b>	<b>National and State Nursing and Midwifery Commissions</b> to regulate education, service standards, and conduct.
<b>Tenure and Accountability</b>	<b>Fixed tenures for Commission members</b> to ensure transparency and prevent reappointment for vested interests.
<b>Uniform Admission and Competence</b>	<b>Implementing standardized admission</b> processes and maintaining competence for high-quality healthcare services.
<b>Innovation and Collaboration</b>	<b>Encouraging technology and industry collaboration</b> for advanced nursing education, excellence, and research.
<b>Soft Skills and Specialized Courses</b>	Focusing on <b>soft skill development</b> and recognizing specialized courses to enhance nursing professionals’ expertise.
<b>Global Mobility and Expertise</b>	<b>Facilitating Indian nurses’</b> global mobility through international expert participation in Commission meetings.
<b>Advisory Council and Coordination</b>	<b>Forming a National Advisory Council</b> for balanced representation and promoting collaboration with other healthcare bodies.

## 1.6 Standing Committee Report on “Judicial Process and their Reforms”

The Parliamentary standing committee on Personnel, Grievances, Law and Justice has recommended that judges of the Supreme Court and high courts should be required to declare their assets annually, citing the need for transparency and public trust.

### Key issues highlighted and Recommendations:

Issues Highlighted	Recommendations by the committee
Lack of Transparency in the Judiciary	Recommend enacting a <b>law requiring judges of the Supreme Court and high courts to declare assets annually.</b>
	Emphasize that <b>asset disclosure enhances trust and credibility</b> in the judiciary.
Huge pendency of cases	Establish 4-5 regional benches of SC, wherein the regional benches may <b>decide appellate matters</b>
Non-publication of Annual Report	Currently, only a few HCs release their <b>annual report</b> . SC should direct HCs to <b>publish Annual Reports in a unified format.</b>
Long Court Vacations	Suggest <b>doing away with long court vacations</b> to address the perception of inconvenience to litigants.
	Acknowledge that <b>vacations contribute to the pendency issue.</b>
Lack of Social Diversity in Judicial Appointments	Stress on <b>appointing an adequate number of women and candidates</b> from marginalized sections to high courts and the Supreme Court, promoting <b>diversity and trust in the judiciary.</b>
	Include this provision in the <b>Memorandum of Procedure (MoP)</b> . Currently, only 15% of registered advocates are women
Increasing the Retirement Age of Judges	Propose amending the Constitution to <b>increase the retirement age of high court and Supreme Court judges</b> . The current retirement age is <b>62 years for HC judges and 65 for SC judges</b>
	Reassess <b>judges’ performance</b> based on health, judgment quality, and quantity delivered.
	This can contribute to <b>impartiality and quality in post-retirement assignments.</b>

### Other major Issues in the Indian Judiciary:

Issues	Description
Inadequate Physical and Digital Infrastructure	Shortage of courtrooms, basic facilities, and parking spaces causing overcrowding and procedural delays.
	Need for digital infrastructure for virtual hearings, underscored by the Covid-19 pandemic.
	Live streaming of court proceedings is limited in most courts, excluding certain case categories.

<b>Limited Use of Alternative Dispute Resolution (ADR)</b>	Underutilization of ADR mechanisms like mediation and arbitration, contributes to court burden.
<b>Recruitment Delays</b>	Slow filling of judicial vacancies, resulting in inadequate judge-to-population ratio.
	High courts with almost 400 vacancies; around 35% of vacancies are in the lower judiciary.

#### Other improvements required:

- Strengthen E-Court System: Implement a robust e-court system for digitized records, online filing, e-summons, and video conferencing for hearings.
- Transform Appointment System: Fill judicial vacancies promptly, establish clear appointment timelines, and consider All India Judicial Services (AIJS)
- Case Management Software: Develop software to track case progress, automate tasks, and improve coordination among stakeholders.
- Data Analytics and Case Prediction: Utilize data analytics and AI to predict case outcomes, aiding judges in informed decisions.
- Public Legal Education: Promote awareness programs to empower citizens with legal knowledge, reducing unnecessary litigation.
- Citizen Feedback Mechanism: Establish a feedback system to identify areas for improvement in the judicial process.

### 1.7 Centre's Bill on Election Commission Appointments

A Bill (Chief Election Commissioner and other Election Commissioners (Appointments, Conditions of Service, Term of Office) Bill) has been proposed by the Centre in the Rajya Sabha to amend the process of appointing Chief Election Commissioners (CEC) and Election Commissioners (ECs) in order to address the impact of a Supreme Court verdict.

#### Background:

- In March this year, the Supreme Court ruled that a committee comprising the Prime Minister, Leader of Opposition in Lok Sabha, and Chief Justice of India must appoint CEC and ECs until a relevant law is enacted by Parliament. The court noted that the Constitution lacked provisions for the appointments. The judgment brought the appointment process on par with that of the CBI Director.
- The new Bill's Aim: The proposed Bill seeks to replace the Chief Justice of India with a nominated Cabinet Minister in the committee for appointments.

#### Major features of the new bill:

Feature	Description
<b>Committee Composition:</b>	The bill proposes a committee for <b>selecting members of the Election Commission of India (ECI)</b> . The committee comprises the <b>Prime Minister, the Leader of the Opposition in the Lok Sabha, and a Cabinet Minister</b> nominated by the Prime Minister.
<b>Search Committee:</b>	A Search Committee will be established, led by the <b>Cabinet Secretary</b> . The Search Committee will consist of <b>two other members not below the rank of Secretary to the government</b> , knowledgeable in matters related to elections. This committee will prepare a panel of <b>five individuals eligible for appointment</b> .

<b>Qualifications for Appointment:</b>	The Chief Election Commissioner (CEC) and other Election Commissioners (ECs) must be individuals of <b>integrity</b> . They should have held or currently hold a <b>post equivalent to the rank of secretary</b> . Candidates should possess <b>knowledge and experience in the management and conduct of elections</b> . Earlier, there <b>was no rule prescribing the qualifications</b> for appointment to the posts
<b>Appointments Process:</b>	The Selection Committee, consisting of the <b>Prime Minister, the Leader of the Opposition in the Lok Sabha, and the nominated Cabinet Minister</b> , will appoint the CEC and ECs from the prepared panel.
<b>Impeachment Process:</b>	The bill introduces a provision for the <b>removal of Election Commissioners through an impeachment-like process</b> , similar to the removal process for Supreme Court judges.
<b>Protection of Election Commissioners:</b>	The bill aims to protect Election Commissioners from arbitrary removal by aligning their removal process with that of Supreme Court judges.
<b>Addressing Constitutional Validity:</b>	The bill aims to address the concerns raised in the <b>2015 public interest litigation challenging the constitutional validity</b> of Centre-appointed members of the Election Commission.
<b>Enhancing Transparency:</b>	The introduction of a Search Committee and a panel of eligible candidates aims to enhance transparency and accountability in the selection process.

#### Issues with the proposed bill:

Issue	Explanation
<b>Composition of Selection Committee</b>	The committee consists of the Prime Minister, the nominated Cabinet Minister, and the Leader of the Opposition. This potentially gives the Executive dominance in appointments, undermining the independence of the Election Commission.
<b>Lack of Chief Justice's Involvement</b>	The Bill replaces the Chief Justice of India with a nominated Cabinet Minister in the appointment process. This reduces judicial representation in the committee and might affect impartiality.
<b>Search Committee</b>	While the inclusion of a Search Committee is positive, its effectiveness in selecting suitable candidates and avoiding bias needs to be evaluated.
<b>Decision Beyond Shortlist</b>	The Bill allows the Selection Committee to choose anyone from outside the shortlisted candidates, <b>undermining the purpose of the shortlisting process</b> .
<b>Downgrading of Election Commissioners' Rank</b>	The rank of Election Commissioner is being reduced in the warrant of precedence. This could impact their stature

- To ensure the utmost transparency, credibility, and impartiality of the Election Commission, it's advisable for the government to consider broader consultations and maintain a balance between various stakeholders, thereby reinforcing the institution's role as a bastion of democratic integrity.
- One important suggestion by former Chief Election Commissioner of India S Y Quraishi to improve the bill is to have a unanimous verdict as a precondition to the appointment process.

## 1.8 Health Facilities for Tribal Women Report

A Parliamentary Committee (on the empowerment of women) tabled a report criticizing the Union government for lacking disaggregated data on tribal populations' health conditions and emphasized the need for comprehensive data collection.

### Major Highlights of the Report:

Key Highlights	Description
Lack of Disaggregated Health Data	The report highlights the absence of detailed data on the health conditions of tribal populations in the country.
Early Marriage	Early marriage in tribal women causes early pregnancy and other general health risks.
Prevalence of Health Issues among Tribal Women	The report highlights how <b>tribal women suffer from malnutrition</b> , a high infant mortality rate (over 41%), and communicable diseases like malaria, tuberculosis etc (NHFS-5)
	<b>More than half of tribal women</b> of reproductive age suffer from <b>anaemia</b>
Online Portal for Registration	An online portal is being established for tribal people to register for diseases, allowing targeted interventions.
	However, the committee critiques the online portal and suggests setting up self-help kiosks for easier registration.

### Key Recommendations:

- Extensive Data Collection: The committee recommended the inclusion of tribal sub-samples in the National Family Health Survey-5
- Empowerment of ministry: The committee suggests empowering the Tribal Affairs Ministry to plan resources for tribal welfare in various sectors.
- Ministry of Tribal Affairs should work with MoHFW to generate central health data for tribals with separate classifications like girl children, women of various age groups etc
- Inclusive data collection: The committee recommends including tribal populations in data collection and examining the information periodically.
- Focus on Prenatal, Post-natal Care, and Access to Health Services, including mental health and emergency services.
- Ministry's Efforts to Monitor Tribal Health Data: The Tribal Affairs Ministry is working on a central database to monitor the health of tribal people.
- Linking of the Swasthya portal to various government databases such as the POSHAN tracker
- Education: Devise a special action plan to retain tribal girl children in school and develop an alternate learning program for 'out of school' girl child

## 1.9 A Shift in India's Democratic Landscape

As per the author Suhas Palshikar, "In recent times, India is witnessing a transformation from an imperfect democratic system to an unusual sense of democracy that discards democratic norms".

### A shift in India's governance:

- Use of forceful measures to restore order: The use of demolitions and physical coercion to maintain law and order marks this shift. E.g., the use of Bulldozers to demolish houses of those involved in riots, or other heinous crimes
- State Practices: State governments are increasingly resorting to demolitions as a means of governance, disregarding due process and accountability.
- State Monitoring: Governments use surveillance techniques, including drones and facial recognition, to monitor citizens.
- Citizen Acceptance: E.g., the use of terms like “bulldozer baba” by leaders to resort to tough stances, endorsing instant justice.

### Issues with the new type of instant justice Governance:

Issues	Examples
<b>Selective Targeting</b>	In the Haryana demolition drive, only homes belonging to a specific section of the population were singled out for demolition.
<b>Rule of Law Violation</b>	The principle of the rule of law, ensuring legal equality and equal protection, is disregarded.
<b>Absence of Accountability</b>	This type of governance reflects <b>cynicism about accountability, assuming that the ruler's authority</b> is benevolent and above scrutiny.
<b>Lack of Judicial Scrutiny</b>	The <b>Supreme Court's lukewarm response</b> to demolitions in Uttar Pradesh raised concerns about its role in questioning executive actions.
<b>Procedural Erosion</b>	Legislative techniques such as <b>reducing recourse to parliamentary committees and rushing bills demonstrate</b> an erosion of procedural safeguards.

### Ethical issues concerned:

- The ethical issue with this type of governance lies in its disregard for democratic principles, accountability, and the rule of law. This approach to governance involves using coercive measures and unchecked executive power to swiftly implement decisions, often targeting specific groups or communities. This raises concerns about fairness, justice, and the potential for abuse of power. The lack of transparency, accountability, and respect for individual rights undermines the ethical foundation of democratic governance, leading to potential violations of human rights and the erosion of democratic norms.

## 1.10 The NMC Registered Medical Practitioner (professional conduct) Regulations 2023

The National Medical Commission (NMC) has issued comprehensive guidelines for the professional conduct of registered doctors in India under The NMC Registered Medical Practitioner (professional conduct) Regulations 2023.

### Some key points from the guidelines include:

Aspect	Guidelines
<b>Use of Social Media</b>	<b>Doctors can use social media</b> for providing information or announcements
	The information <b>must be verifiable and not misleading.</b>



	The guideline warns <b>against soliciting patients through social media</b>
	<b>Prohibited:</b> discussing patient treatment specifics, and sharing patient scans online. <b>Patient privacy</b> must be maintained
	Advised to <b>follow decorum when interacting online</b>
<b>Prescription Practices</b>	Doctors required to <b>prescribe generic medicines</b>
	Exceptions for cases <b>requiring specific brand names</b> due to narrow therapeutic index or exceptional situations
	Encouraged to educate patients about the <b>equivalence of generic and branded medicines</b>
<b>Right to Refuse Treatment</b>	<b>Doctors have the right to refuse treatment</b> for abusive, unruly, or violent patients and relatives
	<b>Must not refuse treatment</b> in medical emergencies
	<b>Prohibited from discrimination</b> based on various grounds.
<b>Continuous Professional Development</b>	Doctors mandated to <b>undergo continuous learning throughout</b> active years
	<b>Accumulate 30 credit points</b> in relevant fields every five years
	<b>Annual sessions of at least three credits</b> (ideally six)
	<b>No more than 50%</b> of training online
<b>Professional Conduct</b>	<b>Doctors prohibited</b> from participating in <b>conferences</b> , CPD sessions sponsored by <b>pharmaceutical companies</b>
	Each Doctor shall <b>display the unique registration ID</b> assigned to them in <b>prescriptions, certificates, and money receipts</b> given to patients.
	Doctors cannot be involved in <b>fee splitting, commission from diagnostic services, endorsement</b> of a product or person, operating an open to all medical stores, etc
	<b>Prohibited from receiving gifts, hospitality, or monetary benefits</b> from pharmaceutical companies, medical device companies, or corporate hospitals.
<b>Disciplinary action</b>	Five levels of <b>disciplinary actions</b> ranging from warning to permanent debar from practice for RMP

#### Issues with the guidelines:

##### Related to Generic Medicines:

- Quality of Generic Medicines: Doctors express concerns about the quality of generic medicines available
- Limited Availability of Generic Medicines: The availability of these medicines in pharmacies is limited due to low-profit margins.
- Ineffectiveness of Generic Substitutes: Since the quality of generic medicines can vary across companies, prescribing generics without standardized quality control might lead to ineffective treatments.
- Loss of Doctor's Choice: Doctors might lose the ability to prescribe the best-suited medication for a

patient, considering their medical history and specific needs.

**Other issues:**

- Consultation Fees Disclosure: While doctors must disclose consultation fees upfront, estimating surgical or treatment costs accurately might be challenging.
- CPD Implementation: The requirement for Continuous Professional Development (CPD) might burden doctors with additional training
- Sponsorship Restrictions: The prohibition of pharmaceutical industry sponsorship for conferences and educational activities could limit the availability of educational opportunities for doctors.
- Patient Privacy: Balancing social media use with patient privacy might be complex, as even images posted online can be owned by social media companies or the public.

**What are Generic medicines?**

- They are pharmaceutical products that are equivalent to brand-name drugs in terms of active ingredients, dosage, strength, route of administration, quality, and intended use. Generic medicines provide cost-effective alternatives to branded drugs while maintaining the same therapeutic effects.

**Examples of generic medicines include:**

- Paracetamol: Generic version of the brand-name drug Tylenol.
- Amlodipine: Generic version of the brand-name drug Norvasc.

**About National Medical Commission (NMC):**

- Establishment: Enacted through the National Medical Commission Act of 2019.
- Responsibilities: Overseeing all aspects of medical education, practice, and institutions.

**Boards within NMC:**

- Under-Graduate Medical Education Board (UGMEB)
- Post-Graduate Medical Education Board (PGMEB)
- Medical Assessment and Rating Board
- Ethics and Medical Registration Board
- Composition: Consists of 25 members, including the Chairperson, Presidents of Postgraduate Medical Education Boards, Presidents of Undergraduate Medical Education Boards, Director General of the Indian Council of Medical Research (ICMR), and Director General of Health Services.

### 1.11 Scheduled Caste (SC) status for Dalit Christians

- The Union Government established a commission, led by former Chief Justice K.G. Balakrishnan, to explore the possibility of granting Scheduled Caste (SC) status to Dalit Christians.
- The Tamil Nadu Assembly passed a resolution to amend the 1950 Presidential (SC) order to include them.
- The Justice Ranganath Misra Commission (2007) and studies by Deshpande and Bapna (2008) favoured extending reservation benefits to Dalit Christians.
- Hindu Dalits converted to Christianity to escape caste-based discrimination but haven't achieved the expected equality due to lingering social hierarchies. The article highlights the need to recognize the unique struggles of Dalit Christians through the "Theory of Intersectionality," which considers multiple forms of oppression like race, gender, and religion intersecting.
- The term "Dalit Christians" reflects a distinct identity, challenging the misconception that conversion erases caste discrimination. The legal framework's focus on single-axis categorization has led to exclusion, and amending the SC list through the 1950 order is proposed as a solution.

Constitutional Provisions	Description
Article 15(4)	Special provisions for the <b>advancement of Scheduled Tribes (STs)</b> .
Article 16(4A)	Provides for <b>reservation in promotion to certain posts</b> where they are underrepresented.
Article 17	<b>Abolishes Untouchability</b> , ensuring the elimination of caste discrimination.
Article 46	Mandates the State to promote the educational and economic interests of <b>backward classes, particularly SCs and STs, and protect them from social and economic exploitation</b> .
Article 335	<b>Requires considering the claims of SCs and STs for appointments to posts</b> , balancing with administrative efficiency.
Article 330 and Article 332	Reserves seats in the <b>House of the People (Lok Sabha) and the Council of States (Rajya Sabha) respectively for SCs and STs</b> .
Part IX and Part IXA of the Constitution	Envisages and provides reservations for <b>SCs and STs in Municipalities</b> .

### Who is included in the Constitution Order of 1950?

- When enacted, the Constitution (Scheduled Castes) Order of 1950, initially provided for recognising only Hindus (with exceptions) as SCs, to address the social disability arising out of the practice of untouchability.
- The Order was amended in 1956 to include Dalits who had converted to Sikhism (in entirety) and once more in 1990 to include Dalits who had converted to Buddhism. Both amendments were aided by the reports of the Kaka Kalelkar Commission in 1955 and the High-Powered Panel (HPP) on Minorities, Scheduled Castes and Scheduled Tribes in 1983 respectively.
- The Union government in 2019 rejected the possibility of including Dalit Christians as members of SCs, rooting the exclusion on an Imperial Order of 1936 of the then colonial government, which had first classified a list of the Depressed Classes and specifically excluded “Indian Christians” from it.

### Why are Dalit Christians excluded?

- The Office of the Registrar General of India (RGI) had cautioned the government that SC status is meant for communities suffering from social disabilities arising out of the practice of untouchability, which it noted was prevalent in Hindu and Sikh communities.
- It also noted that such a move would significantly swell the population of SCs across the country.
- In 2001, RGI referred to a 1978 note and added that like Dalit Buddhists, Dalits who converted to Islam or Christianity belonged to different sets of caste groups and not just one, as a result of which they cannot be categorised as a “single ethnic group”, which is required by Clause (2) of Article 341 for inclusion.

## 1.12 Impact of the DPDP Bill on the RTI Act

Recently passed Digital Personal Data Protection Bill in India has raised concerns among privacy experts due to its potential impact on the landmark right to information (RTI) law.

### Major Provision of the New Bill:

Aspect	Details
	<b>The Digital Personal Data Protection Bill 2022 (DPDP) is India’s new law aimed at regulating the collection, storage, and processing of personal data, based on the recommendation of the committee led by retired Justice B N Srikrishna.</b>

<b>Personal Data</b>	Personal data is any data by which or in relation to which an individual can be identified E.g., Name, address
<b>Rights of Individuals on Personal Data</b>	Individual consent is required for collection and Processing. Individuals also have the right to withdraw consent and demand the erasure of data
	The bill mandates that individuals can access essential information in languages listed in the Indian Constitution's eighth schedule.
<b>The 2022 Bill outlines seven principles:</b>	<ol style="list-style-type: none"> <li>1. Usage of personal data must be lawful, fair, and transparent.</li> <li>2. Personal data should be used only for its intended purposes.</li> <li>3. Data minimization is emphasized.</li> <li>4. Data accuracy during collection is crucial.</li> <li>5. Personal data shouldn't be stored indefinitely; limited storage duration is mandated.</li> <li>6. Safeguards must prevent unauthorized data collection or processing.</li> <li>7. Accountability lies with the entity determining data processing purpose and means</li> </ol>
<b>Data Principle and Data Fiduciary</b>	The bill defines "Data Principal" as the individual whose data is collected, "Data Fiduciary" (e.g., Facebook) as the entity controlling data processing, and acknowledges parents/ guardians as "Data Principals" for children under 18.
<b>Creation of an Independent Regulator</b>	'Significant Data Fiduciaries' handle substantial personal data and will be designated by the Central government based on specific criteria. They must appoint a 'Data Protection Officer' and an independent Data Auditor.
<b>Cross-Border Data Transfer</b>	The bill permits cross-border data transfer to specified countries with strong data security measures, where the Indian government can access Indians' data. This is a departure from the previous bill, which mandated local data storage requirements.
<b>Grievance Redressal</b>	Establish a Data Protection Board for enforcing compliance. If Data Fiduciary's response is unsatisfactory, consumers can file complaints with this Board.
<b>Penalties</b>	Entities lacking "reasonable security safeguards" against data breaches face fines of up to Rs 250 crore. The proposed Data Protection Board could levy penalties of up to ₹500 crore for substantial non-compliance. Top of Form
<b>Exemptions</b>	The bill offers exemptions (by the government) for businesses based on user numbers and data volume, addressing concerns from startups about compliance burden. National security and government agency exemptions are retained, safeguarding India's interests.
<b>Non-Personal Data</b>	The bill mandates providing non-personal data to the government when demanded.

**The Digital Personal Data Protection Bill impacts the Right to Information (RTI) Act in the following ways:**

- Exemption of Personal Information: The new data protection law changes a provision in the RTI Act to exempt "personal information" from being disclosed. This affects information sought under the RTI law.
- Impact on Transparency: Activists and experts are concerned that the change will reduce transparency and hinder the ability to access information.
- Blanket Ban on Personal Information: The new law introduces a blanket ban on personal information,

making it difficult to access information even if it relates to public activities or larger public interest.

- **Increased Denials:** Officials are expected to deny more RTI requests using the personal information exemption, affecting the availability of crucial information.
- **Exception Burden:** While the change doesn't affect the provision allowing access if public interest outweighs the harm, it shifts the burden to individuals seeking information to prove its public interest.

### 1.13 Suspensions of Members of Parliament (MPs)

Recent suspensions of Members of Parliament (MPs) have raised concerns about the legality, rationale, and constitutionality of such actions (as per the author).

Example: Adhir Ranjan Chowdhury's recent suspension in LS; Sanjay Singh and Raghav Chadha (in Rajya Sabha)

- **Method of Suspending Members in India's Parliament:**

#### General Principle of Presiding Officers

- The fundamental principle is that the Presiding Officer, i.e., the Speaker of Lok Sabha and Chairman of Rajya Sabha, is responsible for maintaining order to ensure the smooth functioning of the House. To uphold proper proceedings, the Speaker/Chairman can compel a member to leave the House if necessary.

Method	Process and Rule Used
Lok Sabha	<b>Under Lok Sabha Rule 373</b> , the Speaker has the authority to instruct a member to <b>leave the House immediately</b> . On the Non-compliance of the instruction, the chair names members causing disruptions under <b>Rule 374</b>
	Government introduces <b>suspension motion</b>
	The motion seeks <b>approval of the House</b> . If passed, the member is suspended.
Rajya Sabha	Chair identifies disruptive members under <b>Rule 256</b>
	<b>A suspension motion was presented</b> to the House.
	The motion requires House approval. On approval, the member is <b>suspended</b> . The House may, however, by another motion, <b>terminate the suspension</b> .
Rule for Suspending	Rules framed under <b>Article 118 of the Constitution</b> . Suspension is based on either <b>Rule 374</b> (Lok Sabha) or <b>Rule 256</b> (Rajya Sabha).
	The suspension follows the <b>established procedure</b> . It usually <b>lasts until the end of the ongoing session</b> .

#### Differences in powers of Speaker and Chairman of Rajya Sabha:

- Like the Speaker in Lok Sabha, the Chairman of Rajya Sabha is empowered under Rule Number 255 of its Rule Book to "direct any Member whose conduct is in his opinion grossly disorderly to withdraw immediately" from the House.
- Unlike the Speaker, however, the Rajya Sabha Chairman does not have the power to suspend a Member.

#### Implications of Suspending Members from India's Parliament

- **Disruption to Proceedings:** Suspended members can't participate, potentially hampering legislative activities.
- **Legal Implications:** The Supreme Court's 2022 Ashish Shelar vs Maharashtra Legislative Assembly ruling declared suspensions beyond rule-prescribed periods unconstitutional.

- Deviation from Rules: Recent cases (e.g., Sanjay Singh, Raghav Chadha, Adhir Ranjan Chowdhury) show suspensions exceeding typical limits or pending investigations, departing from traditional norms.
- Challenge to Democracy: Excessive reliance on suspensions might silence opposition voices, impacting democratic debates.
- Conflict Resolution Need: Such suspensions underscore the necessity for improved methods to handle disagreements within Parliament.

## 1.14 Renouncing Indian citizenship

A growing number of Indians are relinquishing their citizenship, primarily seeking better economic opportunities and social security abroad.

### What does Data show?

- Over 15 lakh Indians have given up their citizenship in the past decade, with many heading to the United States.
- High-net-worth individuals are also leaving India (through investment migration), with around 6,500 expected to move out this year, making it the second-highest net outflow globally after China.
- The USA remains the most preferred destination, followed by Canada, Australia, and the UK.
- The MEA estimated the number of Indian nationals living abroad to be around 1.2 crore in 2021.

### Reasons for Renouncing Citizenship:

Reasons	Explanation
<b>Better Economic Opportunities</b>	Seeking improved job prospects and higher income abroad.
<b>Improved Social Security</b>	Looking for better healthcare, education, and social welfare benefits in the new country.
<b>Lifestyle Considerations</b>	Pursuing a better quality of life, safety, and overall living standards.
<b>Friendly Tax Legislation</b>	Opting for countries with favourable tax laws and reduced financial burdens.
<b>Education Opportunities</b>	Accessing higher education and specialized programs is not available in the home country.
<b>Ease of Mobility</b>	Obtaining a passport that allows <b>visa-free travel</b> to more destinations globally.
<b>Political Stability</b>	Escaping political instability, conflict, or governance issues in the home country.
<b>Environmental Factors</b>	Moving to places with better environmental conditions and climate.
<b>Family Reasons</b>	Reuniting with family members already settled in another country.
<b>Investment and Business Opportunities</b>	Exploring entrepreneurial ventures or investment opportunities abroad.

## What is Citizenship?

- Citizenship is the legal and social relationship between an individual and a state, signifying full membership and allegiance to that state.
- In India, there are citizens and aliens, with citizens being integral members of the nation and enjoying all civil and political rights.
- This concept of citizenship creates an exclusionary distinction from non-citizens.
- The Citizenship Act of 1955 prescribes five ways of acquiring citizenship, viz, birth, descent, registration, naturalisation and incorporation of territory.

## Principle of Citizenship:

- Two widely recognized principles determine the granting of citizenship: “jus soli,” which grants citizenship based on place of birth, and “jus sanguinis,” which considers blood ties.
- India has leaned towards the concept of jus soli since the days of the Motilal Nehru Committee in 1928, rejecting the racial notion of jus sanguinis as it contradicted Indian values and ethos.

## 1.15 The land scheme is reserved only for domiciles: J&K administration

- The Jammu and Kashmir Lieutenant Governor’s administration has announced that the land reserved for the landless scheme under the Pradhan Mantri Awas Yojana (Gramin) will be exclusively available to domiciles of the Union Territory.
- A person will be considered landless if they are a resident of J&K and lack land in their name or their family’s name, not eligible to inherit a specific amount of land.
- The state land will be leased to landless beneficiaries under PMAY (G)/Awas plus of the Rural Development Department. Lease payment includes a token amount and nominal rent.
- The lease will be for 40 years, extendable for another 40, but failure to build a house within two years leads to lease cancellation.

## 1.16 ECI: Point of contention between the government and the judiciary

- Recently, the government introduced a Bill that seeks to replace the Chief Justice of India with a cabinet minister nominated by the Prime Minister in the committee of selection for the appointment of the Chief Election Commissioner and other Election Commissioners in India.
- Previously, The Supreme Court gave a unanimous judgment on March 2 and directed that the Chief Election Commissioner (CEC) and Election Commissioners (ECs) should be appointed by the President based on a committee’s advice. This committee would include the Prime Minister, the Leader of the Opposition in the Lok Sabha or the largest Opposition party leader, and the Chief Justice of India (CJI).

## The ongoing debate in light of the recent Supreme Court judgement:

- Rationale: Article 324(2) reads “The appointment of the Chief Election Commissioner and other Election Commissioners shall, subject to the provisions of any law made on that behalf by Parliament, be made by the President.”
- Since there is no law made by parliament on this issue as provided in the Constitution, the Court felt the need to step in to fill the “constitutional vacuum.”
- Government’s position: The government had argued that in the absence of such a law by parliament, there is no real “vacuum” as the President has the constitutional power to decide on the matter and asked the SC to exhibit Judicial restraint.
- Separation of powers: The debate has focussed on the separation of powers which is a feature of the basic structure of the constitution. The question is whether SC is in line to produce such a pronouncement versus whether a government to be elected can appoint persons governing the process of election.
- Parliament’s new bill: The new bill has been the government’s rebuttal to the judiciary.
- Issues in the bill: The bill attempts to return to the status quo of government decisions while including only the leader of the opposition (replacing the provision of CJI with the minister as a member).



- This has been criticised as the government of the day having a greater voice in appointing such an important body.
- Other subjects of debate: The SC had left the question of funding the EC, the Permanent secretariat and the need for expenditure to be charged to the Consolidated Fund of India for the government to decide.

**Suggested measures:**

- Transparency and independence in appointment: The appointments should be made by a bipartisan committee that includes representatives from various stakeholders.
- Also, the publishing minutes of the meeting of such a committee is essential.
- Judicial restraint: The judiciary must be aware of drawing the line between activism and overreacting to exercise restraint except when a true constitutional or executive vacuum exists.
- Independence of the commission: The ECI should be given complete autonomy in the conduct of elections which can be done by creating a dedicated cadre of officers responsible for election duty.
- Charged expenditure and other infrastructure: The government must act on the nudge of the SC to provide a permanent secretariat and other infrastructure along with funding via charged expenditure to ensure the commission's independence.

**Current provisions:**

- Appointment: The President appoints the Chief Election Commissioner (CEC) and Election Commissioners. The President makes the appointment on the advice of the Union Council of Ministers headed by the Prime Minister.
- Tenure: They have a fixed tenure of six years, or up to the age of 65 years, whichever is earlier.
- Service conditions: They enjoy the same status and receive salary and perks as available to Judges of the Supreme Court (SC) of India.
- Removal: The CEC can be removed from office only through a process of removal similar to that of an SC judge by Parliament.
- Number of commissioners: As per Article 342(2) the Election Commission shall consist of the CEC and such number of other election commissioners, if any, as the President may from time to time fix.

## 2. International Relations

### 2.1 South Asia's Integration

- C. Raja Mohan discusses the evolving economic landscape of South Asia. He highlights recent visits by leaders like Nepal's Prime Minister Pushpa Kamal Dahal and Sri Lanka President Ranil Wickremesinghe to Delhi, showcasing a shift in South Asian regionalism.
- India's vision of regional economic integration in South Asia is based on enhanced intra-regional trade, investment flows, and regional transport and communication links in South Asia. South Asian Association for Regional Cooperation (SAARC) and India's Neighbourhood First Policy are the two vehicles in this process.

#### How India's growing economy is having a positive effect on South Asia?

Aspect	Description
<b>Economic Growth</b>	India's economy is growing and poised to become the third-largest economy.
<b>Trade Volumes</b>	Intra-regional trade grew from <b>2% in 1990 to 6% now (but compared to ASEAN countries ( over 27% integration, it is still low)</b>
<b>Bilateral Trade Potential</b>	India's exports: <b>\$16 billion to Bangladesh, \$6 billion to Sri Lanka, and over \$8 billion to Nepal in 2022.</b>
<b>Cross-Border Connectivity</b>	Major initiatives for cross-border connectivity are complementing trade volumes e.g., trains and bus services with Bangladesh, Nepal
<b>Economic Reform</b>	Economic crises in countries like Sri Lanka and Pakistan are pushing for serious economic change.
<b>Openness to Trade and Investment</b>	Nepal and Sri Lanka are more open to trade, investment, and connectivity with India.
<b>Global Power Rivalry Influence</b>	US-China rivalry and India- China conflict have altered the <b>Subcontinent's geo-economic dynamics.</b>
<b>Support for Regionalism</b>	Western nations are supporting <b>India-centered regionalism and economic integration in the region.</b>
<b>Transformational Potential</b>	These factors combined could potentially transform South Asia's economic landscape.

#### South Asian regional integration can overcome political disputes:

- Economic Interdependence: As trade benefits economies, it encourages nations to resolve political issues.
- Sub-Regional Initiatives:g., BMIC, India-Mynmmar trilateral highway, SAFTA.
- People-to-People Contacts: Promoting cultural exchanges, educational programs, and tourism can help build positive relationships among citizens across borders.
- Shared Challenges: Addressing common challenges like climate change, terrorism, and natural disasters requires cooperation.
- Diplomatic Engagement: Confidence-building measures, trust-building initiatives, and regular dialogues

can help ease tensions.

- Economic Incentives: Japan's effort in promoting India-Bangladesh connectivity

#### India can lead South Asia's development by:

- Boosting regional trade, connectivity, and investment.
- Providing an ecological blueprint for biodiversity protection and climate response.
- Focusing on regional food security and supply chains.
- Promoting sub-regional initiatives for cooperation.
- Representing South Asian interests in international forums.

#### Conclusion:

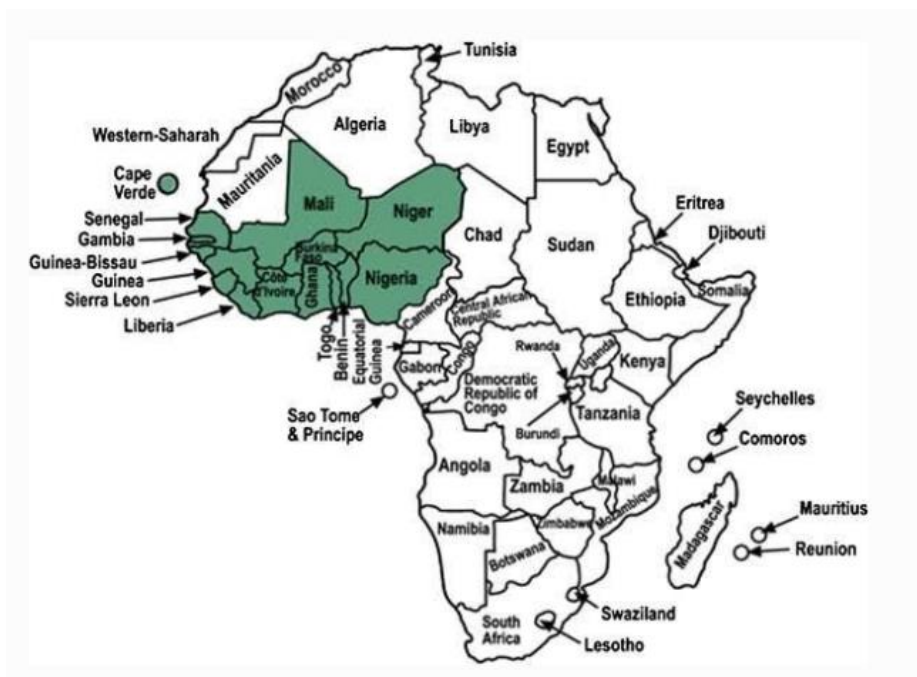
- Together the three trends — the region's new economic openness, India's vigorous neighbourhood policies, and Western support for an India-centred regionalism in South Asia — could transform the Indian subcontinent's geo-economic landscape. India's rising economic tide could help lift all boats in South Asia.

## 2.2 Economic Community of West African States (ECOWAS)

- In the ongoing crisis in Niger, where a military coup ousted the president, ECOWAS has been active.
- The Economic Community of West African States (ECOWAS) is a regional bloc established in 1975 with the goal of promoting economic integration among its 15 member countries in West Africa.
- Members: These countries include Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Sierra Leone, Senegal, and Togo.
- Aim: ECOWAS aims to achieve a single common currency and create a large trading bloc in various sectors like industry, transport, telecommunications, energy, finance, and culture.
- The organization is committed to democratic principles, the rule of law, and good governance.

#### Actions taken:

- ECOWAS has a history of intervening in conflicts within the region, having deployed peacekeeping forces and playing roles in resolving conflicts in countries like Liberia and Sierra Leone.
- It suspended members like Mali, Guinea, and Burkina Faso following coups in those countries, refusing to recognize their new governments.



## 2.3 Interpol Global Academy Network

The Central Bureau of Investigation (CBI) Academy has recently joined the Interpol Global Academy Network as its 10th member.

### What is Interpol Global Academy Network?

- It is an initiative launched by Interpol in 2019 to enhance global law enforcement training. It fosters collaboration among law enforcement training institutions through joint programs, research, and knowledge exchange while promoting excellence and innovation in training.

### About CBI Academy

- The CBI Academy is the training institution of India's premier investigative agency, the Central Bureau of Investigation (CBI). Established in 1996, the academy is in Ghaziabad, Uttar Pradesh, aiming for professionalism, impartiality, and dedication. It offers diverse training on topics like cybercrime, and anti-corruption, and collaborates with foreign agencies and international organizations.

### About CBI:

- The Central Bureau of Investigation (CBI) was founded in 1963 to combat corruption and breaches of central laws. Operating under the Delhi Special Police Establishment Act, it investigates bribery, corruption, organized crime, and international cases.

## 2.4 North Sea Transition Authority (NTSA)

The U.K. plans to conduct more fossil fuel drilling in the North Sea, sparking concerns about its alignment with climate goals. The North Sea Transition Authority (NTSA) is conducting offshore oil and gas licensing, with over 100 licenses expected to be awarded. This move aims to enhance energy independence.

### What is the North Sea?

Geographically, the North Sea lies between England and Scotland on its west, the Netherlands, Belgium, and France on its south, and Norway, Denmark, and Germany on its East.

### Why is the North Sea important?

- Almost the entire seabed of the North Sea is a continental shelf (depth of only about 200 meters). The geological formations beneath the North Sea, such as porous rocks and structural traps, provide suitable environments for the collection of oil and gas reserves.

### Why is offshore drilling problematic?

- Offshore drilling is problematic due to its environmental risks, including threats to marine life, biodiversity, climate change, and ocean ecosystems.
- The 1958 Geneva Convention (which came into force in 1964) on the Continental Shelf was the first international legislation to establish the rights of countries over the continental shelves adjacent to their coastlines and paved the way for exploration in the North Sea.

## 2.5 Pacific islands face the risk of drowning

- The World Meteorological Organization (WMO) has issued a warning that sea levels around the Pacific Islands are rising at a rate of approximately 4 mm per year, slightly faster than the global average.
- This accelerated rise poses a serious threat to low-lying islands like Tuvalu and the Solomon Islands. The warning comes from the WMO's State of the Climate in the South-West Pacific 2022 report.
- The report also highlighted the occurrence of marine heatwaves in a substantial region northeast of Australia and south of Papua New Guinea, spanning more than six months.
- The report revealed that the region experienced 35 natural hazards in the previous year, leading to over

700 deaths. These events directly affected more than 8 million individuals.

- The findings of the WMO report highlight the urgent need for comprehensive climate action to mitigate these impacts and safeguard the future of these vulnerable island nations.

## 2.6 India-UK Relationship

The article discusses the U.K.-India relationship and the opportunities it presents across various aspects.

Various aspects of the India-UK relationship:

Aspect	Key Points
<b>Political Relationship</b>	India's political system influenced by UK. – Shared democratic values. – Collaboration on global issues. – Support for UN Security Council seat and NSG membership. – Joint declaration for annual Summits and meetings.
<b>Bilateral Institutions</b>	Regular Foreign Office Consultations. – Disarmament and Non-Proliferation Dialogue. – Counter Terrorism Joint Working Group. – UN Dialogue, Policy Planning Dialogue, Cyber Dialogue, etc. – Institutionalized economic mechanisms.
<b>Defence Collaboration</b>	Strategic partnership since 2004. – Joint military exercises. – Cooperation in cyber security and maritime security. – “Make in India” campaign involvement. – Carrier Strike Group deployment in Indian Ocean.
<b>Nuclear Cooperation</b>	Civil Nuclear Cooperation Declaration (2010). – Nuclear Collaboration Agreement (2015). – Collaboration on energy and climate change.
<b>Terrorism and Extremism</b>	Cooperation against terrorism and extremism. – Push for UN Comprehensive Convention on International Terrorism.
<b>Economic Relations</b>	The Joint Economic and Trade Committee ( <b>JETCO</b> ) was established in 2005. – India-UK Free Trade Agreement talks. – Bilateral trade and investment growth.
<b>Trade and Investment</b>	Bilateral trade <b>worth £36 billion in 2022</b> . India is the <b>U.K.'s second-largest</b> source of investment projects, and the <b>U.K. has invested \$34 billion</b> in India as foreign direct investment. <b>Rupee-denominated bonds</b> . The U.K. is <b>launching the 'Alive with Opportunity' marketing campaign</b> to celebrate and strengthen the bond between the two countries and attract Indian investments in the UK
<b>Education and Research</b>	Science and Technology Agreement (1996). – Science & Innovation Council. – India Education and Research Initiative ( <b>UKIERI</b> )
<b>Climate and Environment</b>	Cooperation on climate-related issues. – <b>Green Growth Equity Fund</b> for renewable energy and environment.
<b>Health Collaboration</b>	Health sector collaboration, pandemic preparedness, research, Ayurveda, and Yoga.
<b>Cultural Engagement</b>	Memorandum of Understanding on Cultural Cooperation (2010). – Nehru Centre for Cultural Outreach. – The concept of a <b>'living bridge'</b> is emphasized, highlighting the dynamic exchange between the two countries.

<b>People-to-People Contact</b>	Indian diaspora's influence in the UK. – Indian student community in the UK. – Shared interests in cricket, cuisine, yoga, and festivals.
<b>UK's Significance for India</b>	Support for UNSC seat, NSG membership, and development objectives. – Economic and technological partnership. – Defense and security cooperation.
<b>India's Significance for UK</b>	Role in "Global Britain" ambitions. – Seizing opportunities in the Indo-Pacific. – Economic ties, investments, and rejuvenation of the Commonwealth.

**The current major bilateral issues between India and the UK include:**

- Extradition of Indian Economic Offenders: The issue pertains to the extradition of Indian economic offenders who have sought refuge in Britain and are utilizing the legal system to their advantage.
- g., Vijay Mallya and Nirav Modi
- Umbilical Link with Pakistani Deep State: This link sometimes leads to British involvement in matters related to Jammu and Kashmir, utilizing Pakistan's support.
- Issues with differing expectations on FTA talks
- Taxation: Britain has raised the matter of existing tax disputes of Vodafone Group Pic. and Cairn India Ltd with the Indian government.
- Non-Acceptance of India's Rise: Some segments of white Britain, including the media, might not fully acknowledge India's emergence as a global power.

**Conclusion:**

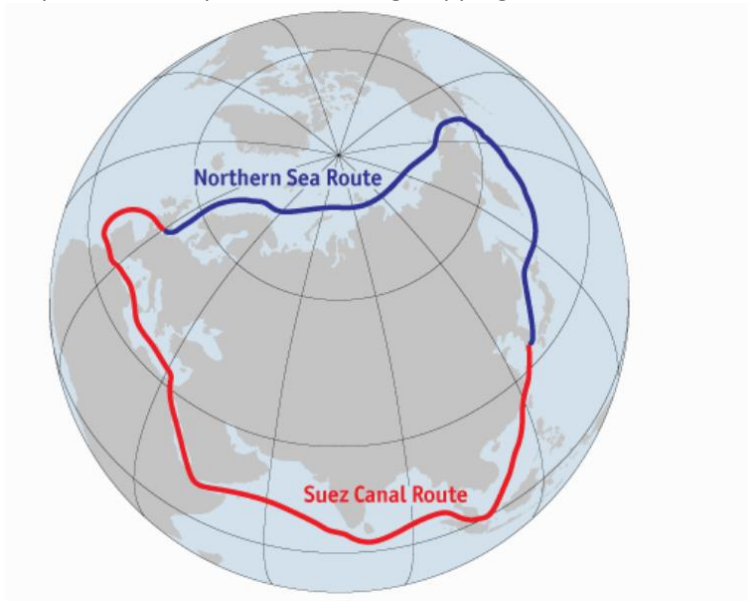
With a historic foundation of culture, history, and language, there is a unique opportunity to further deepen the India-UK relationship, leveraging their strengths for mutual prosperity.

**2.7 India and the Northern Sea Route**

The Arctic region holds significance for India due to potential impacts on economic security, water security, and sustainability arising from climate change.

**What is the Northern Sea Route (NSR)?**

- It is the shortest shipping route connecting Europe and the Asia-Pacific region. Spanning 5,600 km, it passes through four seas of the Arctic Ocean. The route starts at the boundary between the Barents and Kara seas (Kara Strait) and concludes at the Bering Strait (Provideniya Bay). The NSR offers potential distance savings of up to 50% compared to existing shipping lanes via Suez or Panama.



### How is Russia making the NSR navigable?

- Russia ensures the navigability of the Northern Sea Route (NSR) by using icebreaking assistance, as the Arctic Ocean remains icebound for most of the year. Russia maintains the world's only nuclear-powered icebreaker fleet.
- The inaugural nuclear icebreaker, "Lenin," operated from December 1959 for thirty years. Today, the fleet of nuclear-powered icebreakers, overseen by Rosatom's subsidiary FSUE Atomflot, ensures secure navigation on the Northern Sea Route (NSR).

### India's participation in NSR development is driven by:

- Growing Cargo Traffic: NSR cargo traffic increased by about 73% during 2018-2022.
- Strategic Transit Route: India's geographical location and reliance on sea transportation make the NSR a crucial transit route.
- Chennai-Vladivostok Maritime Corridor (CVMC): This project, stemming from a 2019 memorandum of intent, shortens transport time to 12 days (almost reduced by a third). It allows efficient trade through the Sea of Japan, the South China Sea, and Malacca Strait.
- Cargo Potential: A study by Chennai Port Trust shows CVMC can import items like coking coal, crude oil, LNG, and fertilizers from Russia to India efficiently
- Geopolitics: India would like to complement China and Russia's potential collective influence over NSR.

### India's engagement in the Arctic:

- India's engagement with the Arctic began when it signed the Svalbard Treaty in February 1920 in Paris between Norway, the US, Denmark, France, Italy, Japan, the Netherlands, Great Britain, and Ireland, and the British overseas Dominions and Sweden concerning Spitsbergen. Ever since then, India has been closely monitoring all the developments in the Arctic region.
- India initiated its Arctic research program in 2007 with a focus on climate change in the region.
- The objectives included studying teleconnections between the Arctic climate and the Indian monsoon, to characterize sea ice in the Arctic using satellite data, and to estimate the effect on global warming.
- India has set up a research station Himadri at Ny-Ålesund, Svalbard, in 2008
- In May 2013, India became an observer state of the Arctic Council along with five others including China.
- India launched its inaugural multi-sensor moored observatory and northernmost atmospheric laboratory in 2014 and 2016 respectively
- Till last year, thirteen expeditions to the Arctic were successfully conducted.

## 2.8 "Global South"

The term "Global South" originated in 1969 during the Vietnam War to critique the unequal global order created by the dominance of the Northern hemisphere over the Southern hemisphere.

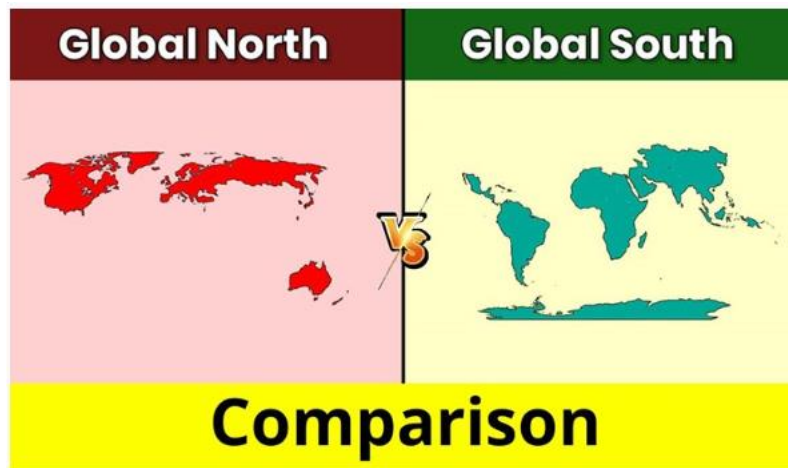
### What is the Meaning of "Global South" with example?

- The term "Global South" refers to countries and regions that are economically and socially less developed in comparison to the more affluent and developed "Global North."
- Examples of Global South countries include India, Brazil, Nigeria, and Indonesia, which often face economic challenges and are considered to be part of the developing world.

### Issues with this terminology:

- Geographically, the division between Global North and Global South based on the 30-degree north latitude line is arbitrary and excludes countries like Australia, New Zealand, and developed countries within the Global South.
- Economically, the term is inconsistent as nations like China, with high per capita income, are categorized as part of the Global South.
- Issues arise due to key allies of the Global North situated in the Southern Hemisphere, which contradicts the categorization.





**Evolving meaning of “Global South”:**

- New Terminology: It's a term some leaders use as an alternative to “developing world”
- Beyond Economics: While the traditional labels focus on economic indicators, “Global South” emphasizes cultural and other differences
- For example, the “Global South” prioritizes sustainable living, ecological balance, and universal healthcare.
- Cultural Distinction: The difference between the Global South and the Global North is more about cultural aspects than just economic or developmental ones.

## 3. Economy

### 3.1 Draft National Tourism Policy

The Indian Ministry of Tourism has drafted a National Tourism Policy with key strategic objectives to enhance tourism's contribution to the economy.

#### The key strategic objectives of the Policy are:

- To enhance the contribution of tourism to the Indian economy by increasing visitation, stay and spend and making India a year-round tourist destination
- To create jobs and entrepreneurial opportunities in the tourism sector and ensure the supply of skilled workforce
- To enhance the competitiveness of the tourism sector and attract private-sector investment
- To preserve and enhance the cultural and natural resources
- To ensure sustainable, responsible and inclusive development of tourism in the country.

#### Key focus areas of the policy:

- Green tourism
- Digital tourism
- Destination management
- Skilling in the hospitality sector and
- Supporting tourism-related MSMEs

#### Status of Tourism in India

- India is ranked 54th place in the global travel and tourism development index 2021, down from 46th in 2019.
- World Travel and Tourism Council calculated that tourism generated over US\$170 billion or 5.8% of India's GDP and supported over 3 crore jobs in 2021
- As of 2022, there are 40 World Heritage Sites located in India. Out of these, 32 are cultural, 7 are natural, and one, the Khangchendzonga National Park, is of mixed type.
- India has the sixth largest number of world heritage sites in the world.
- The need of the hour is faster development of all types of infrastructure (physical, social, and digital) to support tourism. Ensuring the safety of tourists is a top priority, and an official guide system could be introduced to enhance their experience. India's vast size and diverse natural, geographic, cultural, and artistic offerings present immense opportunities for the tourism industry to thrive and capitalize on its potential.

### 3.2 India's chip design ecosystem

As part of the 2nd phase of the design-linked incentive (DLI) scheme for the domestic semiconductor industry, the Indian government is considering a proposal to pick an equity stake in domestic chip design-making companies.

#### What is the domestic chip industry scenario?

- India is an important destination for global semiconductor companies.
- This is primarily because of its highly-skilled talent pool of semiconductor design engineers, who make up ~20% of the world's workforce.
- About 2,000 integrated circuits and chips are designed in India every year.
- Global players operating in R&D in the country include Intel, Micron and Qualcomm, etc.
- Over 30 semiconductor design startups have been established in India following the DLI scheme with five already having received government support.

### **Initiatives to promote the semiconductor industry in India:**

- India Semiconductor Mission (ISM): Launched in 2021, it aims to build a vibrant semiconductor and display ecosystem to enable India's emergence as a global hub for electronics manufacturing and design.
- About Semicon India Programme:
- It was approved with a financial outlay of INR 76,000 crore for the development of a sustainable semiconductor and display ecosystem in 2021.
- At the 'Semicon India 2023' conclave, the Indian PM made a strong pitch to global investors, saying India will emerge as a global hub of the semiconductor and chip-making industry.
- Approval has been granted for the modernisation of the Semiconductor Complex Limited (SCL) in Chandigarh to transform it into a brownfield chip manufacturing unit.
- The government has also signed agreements with the US and Japan for cooperation on semiconductor development, manufacturing, research, design and talent development.

### **What is the DLI scheme?**

- The DLI scheme (launched by MeitY in 2021) aims to provide financial and infrastructural support to companies setting up fabs or semiconductor-making plants in India.
- It will offer fiscal support of up to 50% (max ₹15 crores per application) of the total cost to eligible participants who can set up these fabs in the country, MeitY said in a statement.
- It is expected to facilitate the growth of at least 20 such companies which can achieve a turnover of more than ₹1500 crore in the coming five years and indigenise innovations.

### **How will equity stake help?**

- Equity will empower design companies to sell their chip-designing services more effectively and attract a broader client base in the market.
- It would prevent companies from selling their majority stake to large global players to scale up the business.
- The equity infusion would be particularly encouraging for local, small and medium-sized firms that potentially face multiple hurdles to be part of the ecosystem.

### **Challenges faced by the semiconductor industry in India:**

- The sector is capital-intensive. Therefore, any policy directed towards the semiconductor industry requires a long-term strategy.
- Returns from the investment are not immediate. According to the NASSCOM, it takes up to 2-3 years before the first product is out.
- R&D becomes challenging as chipsets become smaller and functional requirements change frequently.
- Supply chain disruptions, like what happened during the COVID-related lockdowns in China, could dampen potential investor confidence in the sector.
- India owns a much smaller portion of the intellectual property (IP) relating to the designs, which are mostly retained by global companies.

### **Way ahead:**

- The government must consider how it plans to link its investments to drive more innovation and employment generation in the sector.
- It is essential that value-added activities (with respect to chip designing) are brought into the country.
- In other words, moving up in the value chain and enabling the ecosystem must be one of the imperatives of the government.
- The government should put in place a robust framework for target evaluation and governance to mitigate the moral hazard posed by politically driven equity investments.
- Conclusion: The above moves have the potential to create a state-of-the-art design ecosystem which will serve the national interest and also be a supplier to the rest of the world.

### **Indian companies can soon list on foreign exchanges:**

- Indian companies will soon be allowed to directly list their securities on overseas exchanges in specified jurisdictions.

### **What is listing on Stock Exchange?**

- Listing on a stock exchange is the process by which a company's shares or securities are made available for public trading on the exchange. It allows investors to buy and sell the company's stock, providing the company with access to capital and visibility in the financial markets.

### **Present Status:**

- Presently, Indian companies cannot directly list their securities abroad without getting themselves listed in domestic stock exchanges
- In 2020, the Centre amended the Companies Act, allowing the direct listing of Indian companies on foreign stock exchanges, but a framework has not been put in place so far.
- Currently, Indian companies can raise money abroad through American Depository Receipts (ADR) and Global Depository Receipts (GDR) (ADRs are traded on US stock exchanges while GDRs are traded mostly on European Exchanges and used to raise funds)

### **How will Indian Companies get listed on foreign exchanges?**

- The process will involve an initial listing on the International Financial Services Centre (IFSC) in Gandhinagar, followed by permission to list in seven or eight specified overseas jurisdictions.

### **Significance:**

- It will help expand capital-access opportunities for businesses in India and attract more overseas investors, ultimately leading to better valuations for Indian companies.

### **About IFSC:**

- The International Financial Services Centre (IFSC) is a special economic zone in Gandhinagar and caters to customers outside the jurisdiction of the domestic economy. It allows Indian and foreign companies to conduct various financial activities, including offshore banking, insurance, and securities trading, in foreign currencies.

## **3.3 Worldcoin**

- Worldcoin is an initiative to create a digital network where individuals can claim a stake and join the digital economy. The project involves scanning individuals' irises through a device called "Orb" to collect biometric data and issue them a World ID.
- In exchange, participants receive a cryptocurrency called Worldcoin [WLD]. The goal is to build the "world's largest identity and financial public network" accessible globally.
- To be a part of the Worldcoin network, individuals can become "Orb operators" and scan the irises of others, or they can get their own irises scanned to receive a World ID and WLD cryptocurrency.

### **Features:**

- Worldcoin uses biometric data to ensure unique participation and avoid duplications. The company claims to use zero-knowledge proofs (ZKPs) to maintain users' privacy and comply with Europe's General Data Protection Regulation (GDPR).
- WLD's price fluctuates, and it was criticized, especially by NSA whistle-blower Edward Snowden, for using biometrics for verification.
- Worldcoin has been introduced in India, with Orb operators scanning people's eyes at various locations in cities like Delhi, Noida, and Bangalore.

### 3.4 CAG Report on Railway Finance

The Comptroller and Auditor General (CAG) reported that in the fiscal year 2021-22, the financial health of Indian Railways entered a “concern zone.”

#### Key findings of the CAG:

Key Findings	Details
Operating Ratio (OR)	The railway operator <b>spent ₹107 to earn ₹100</b> due to increased pension funding
Net Surplus	Indian Railways couldn't generate a <b>net surplus in 2021-22</b>
Total Expenditure	Ministry of Railways' total expenditure <b>increased over 35% more than the previous year.</b>
High revenue Expenses	Over <b>75% of total working expenses</b> are spent on staff costs, pension payments, and rolling stock lease charges
Dependence on Budgetary Support and Resources	Inadequate internal resource generation led to greater dependence on Gross Budgetary Support (GBS) and Extra Budgetary Resources (EBR)
Cross-Subsidization of Passenger Fares	Passenger fares subsidized by profits from freight operations

### 3.5 RBI launches new features for UPI

Reserve Bank of India (RBI) has introduced several measures to further advance digital payments through the unified payments interface (UPI):

#### Features are:

- Conversational Payments with AI: The RBI is launching “conversational payments” (audio interaction with AI bots) on UPI, enabling users to interact with an AI-powered system to initiate and complete transactions safely.
- This innovative mode aims to enhance ease of use and expand UPI's reach.
- Offline Transactions with NFC: The RBI proposes enabling offline transactions using Near Field Communication (NFC) technology.
- This approach supports digital payments in scenarios with weak or no internet connectivity, enhancing speed and accessibility.
- Transaction Limit Increase for Small-Value Payments: The transaction limit for small-value offline digital payments will be increased to ₹500.
- The overall limit of ₹2,000 will remain to mitigate risks. This adjustment facilitates faster, more reliable, and contactless payments for everyday small-value transactions.
- Expansion of UPI-Lite: The UPI-Lite wallet introduced by RBI, aimed at optimizing processing resources for banks, now processes over 10 million transactions a month, enhancing transaction reliability.
- Digital Public Tech Platform: The Reserve Bank Innovation Hub is developing a digital platform for frictionless credit delivery with open architecture and APIs, allowing seamless connectivity for all financial sector players.

### About UPI:

- A unified payment system (UPI) powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features like Instant transfer of funds, bill-sharing facility, etc. It has been developed by: National Payments Corporation of India.

### About UPI-Lite:

- UPI-Lite is an on-device wallet service that enables low-value transactions without utilizing a Remitter bank's core banking systems in real-time.

### Tourism's Ecological Toll

- Major tourist destinations in Himachal Pradesh and Uttarakhand, Hawaii (USA), Spain, and Greece are facing intermittent distress and closure due to the impact of disasters related to anthropogenic development activities.

### Tourism's Ecological Toll:

Aspect	Explanation	Examples
Ecological Impact	Uncontrolled tourism infrastructure development, such as <b>widened highways and landslides</b> , harms the environment.	Frequent landslides in Himachal Pradesh often on the Char Dham Yatra route
Conflict of Discourses	Disagreement between <b>economic growth and conservation perspectives</b> , leading to a development vs. nature clash.	Development plans vs. conservationists' concerns over protecting <b>fragile ecosystems esp. in the Himalayas and Western Ghats</b>
Hospitality Industry Neglect	Negligence of hotels and resorts towards forest disappearance and improper waste disposal.	<b>Hotels fail to adopt eco-friendly practices</b> , leading to environmental degradation.
Rivers as Drainage	<b>Improper waste disposal in rivers exacerbates flooding</b> and disrupts river habitats.	
Policy Perception	Overemphasis on <b>tourism's economic benefits</b> in policy decisions, neglecting ecological consequences.	
Tourists' Impact	Unaware tourists unintentionally contribute to environmental harm through travel styles, overconsumption and preferences.	

### Steps taken to address the Issues:

- National Strategy for Sustainable Tourism and Responsible Traveller Campaign: Launched in 2022 by the Union Ministry of Tourism
- Kerala Tourism's Green Carpet initiative promotes eco-friendly practices in tourism.
- Uttarakhand's ban on construction in the 100-meter radius of rivers to protect river ecosystems.
- Sunderbans National Park's management plan is to ensure wildlife conservation alongside tourism.
- Ladakh's promotion of electric vehicles and solar-powered accommodations for sustainable tourism.
- Sikkim's development of sustainable homestays and eco-lodges blend with the natural environment.
- Amsterdam: Its mayor has decided to ban cruise ships from docking at the city centre
- Hawaii: Residents are protesting against the high footfall of tourism, often interfering with their social and cultural life.

### 3.6 RBI's State of the Economy report

The State Of The Economy report suggests that despite a global slowdown, the Indian economy has likely maintained healthy growth in the first quarter of the current financial year.

#### Key findings of the Report:

RBI's State of the Economy Report Outcomes	
<b>GDP Growth</b>	The RBI predicts <b>8% economic growth</b> for April-June.
<b>Global Recovery Status</b>	The global economic recovery is <b>slowing down</b> .
<b>Export Situation:</b>	Exports <b>decreased by around 16% in July</b> .
	Merchandise exports hit a nine-month low of \$32.25 billion.
<b>Positive Economic Indicators:</b>	<b>Private consumption and investment activity</b> may counterbalance export decline.
	<b>E-way bill volumes</b> showed robust growth.
	<b>FMCG sales</b> experienced an increase.
	<b>Cargo at major ports</b> and railway freight traffic rose in July.
	Steel and cement consumption witnessed growth.
<b>Areas of Economic Concern:</b>	Automobile sales, except three-wheelers, are low.
	More households/individuals are seeking MGNREGA work compared to last year.
	<b>Non-oil imports decreased</b> , indicating weak domestic demand.
	Uncertainty surrounds the extent of investment increase.
<b>Investment Intention Study:</b>	In 2022-23, plans were made for <b>982 projects worth over Rs 3 lakh crore</b> .
	<b>60% of projects</b> funded by banks and institutions are in <b>infrastructure</b> .
	Major areas: power, roads, bridges, SEZs, biotech, and IT parks.
	Uttar Pradesh, Gujarat, Odisha, Maharashtra, and Karnataka account for over half the project cost.
<b>Future Investment Cycle:</b>	Strong <b>bank and corporate balance sheets</b> suggest a positive future for investment.

#### Inflation:

- Retail inflation in India surged to a 15-month high of 7.44% in July, driven primarily by increased prices of vegetables, cereals, pulses, spices, and milk products. The rise in food prices, especially for vegetables, cereals, and dairy products, has contributed to the overall inflationary trend.



### What is inflation?

- Inflation is the rate at which prices rise. A 2% inflation implies the general price level in April this year was 2% more than what it was in April last year.

### Why is inflation bad?

- It makes commodities costly.
- It essentially erodes the basis on which one makes economic decisions— meaning it reduces the value of money.

### About the report:

- A State of the Economy report by the Reserve Bank of India (RBI) provides a snapshot of the country's economic status. It covers topics such as inflation, economic growth, employment, and the bank's monetary strategies. The report guides RBI's decisions on interest rates and economic policies while aiding economists, investors, and the public in understanding the economy and making informed decisions.

## 3.7 Impact of Geopolitics on Clean Energy Targets

The move to clean energy is complicated by geopolitical factors, particularly in the case of Indonesia's nickel reserves, which are crucial for battery manufacturing.

### What is geopolitics?

- Geopolitics refers to the interplay between geography, political power, and international relations, shaping how nations interact, cooperate, and compete on the global stage.

### Impact of geopolitics in a move to clean energy:

Geopolitical Factor	Complications for Clean Energy	Examples
Resource Dependence	Reliance on specific countries for critical minerals like lithium, cobalt, and rare earth elements.	China's <b>dominance in rare earth production impacts</b> clean energy industries relying on these minerals.
Trade Disputes	Trade conflicts affecting supply chains for renewable energy components.	US-China trade tensions <b>disrupt solar panel and wind turbine</b> supply chains, increasing costs.
Investment Sources	Dependence on foreign investment for clean energy infrastructure.	<b>Indonesia's reliance on Chinese investment</b> for nickel processing affects its clean energy plans.
Technology Transfer	Reliance on foreign technology for clean energy production.	Restrictions on <b>technology transfer</b> impact the development of advanced renewable energy technologies.
Political Stability	Instability in producing countries affecting energy security.	Political turmoil in <b>oil-producing countries</b> can disrupt global energy markets, impacting renewables.
Sanctions and Embargoes	Sanctions limiting access to clean energy technologies and resources.	<b>US sanctions on Iran</b> restrict its ability to access international clean energy technologies.
National	National interests conflict with	Countries prioritize <b>fossil fuel industries for</b>

<b>Interests</b>	global clean energy goals.	<b>economic reasons</b> , hampering renewable energy efforts.
<b>Climate Policy Agendas</b>	Differing climate policies affecting international cooperation.	Countries with <b>divergent climate policies</b> may resist cooperating on global clean energy initiatives.
<b>Access to Finance</b>	Limited access to international funding for renewable projects.	Developing countries face <b>challenges in securing financing</b> for large-scale clean energy projects.

#### Measures that need to be taken:

- Diversification of Supply Chains: Develop partnerships with multiple countries to ensure a stable and diversified supply of key materials.
- International Collaboration, strategic alliances and technology transfer
- Promote Fair Trade Practices: Advocate for fair trade practices and open markets to prevent trade disputes that disrupt clean energy supply chains.
- Investment in Domestic Production: Provide incentives and subsidies for local manufacturing of renewable energy equipment.
- Innovation and Research
- Capacity Building: Support training and knowledge sharing to enhance local expertise in renewable energy technologies.
- Climate Agreements: Encourage countries to set ambitious renewable energy targets and contribute to reducing carbon emissions.
- Financial Mechanisms: Facilitate access to green bonds and other sustainable financing options for clean energy initiatives.
- Sustainable Sourcing Guidelines: Develop and promote guidelines for sustainable sourcing of materials used in renewable energy technologies.

### 3.8 Infrastructure Debt Fund-NBFCs (IDF-NBFCs)

The Reserve Bank of India (RBI) has issued revised guidelines for Infrastructure Debt Fund-NBFCs (IDF-NBFCs) with the aim of enhancing their role in financing the infrastructure sector.

#### About the New norm:

- According to the new norms, IDF-NBFCs must have a minimum net owned fund (NOF) of Rs 300 crore and a capital-to-risk weighted assets ratio (CRAR) of at least 15%, with a minimum Tier 1 capital of 10%.
- They will be allowed to raise funds through rupee or dollar-denominated bonds with at least a five-year maturity
- The requirement for a sponsor for IDF-NBFCs has been removed, and shareholders will now undergo scrutiny similar to other NBFCs.
- Aim: These changes are intended to facilitate a greater flow of long-term debt into infrastructure projects and harmonize financing regulations in the infrastructure sector.

#### What are IDF-NBFCs?

- Infrastructure Debt Fund-Non-Banking Financial Companies (IDF-NBFCs) are specialized financial entities registered as NBFCs with the purpose of facilitating the flow of long-term debt into infrastructure projects.
- They raise funds by issuing bonds, typically with a minimum maturity of five years, to support infrastructure development.
- These entities play a crucial role in financing large-scale infrastructure projects in sectors like transportation, energy, and telecommunications.

**NBFC permitted to:**

- Refinance infrastructure projects that have completed at least one year of commercial operations
- Finance Toll-Operate-Transfer (TOT) projects as a direct lender.

**3.9 Debt-Fossil Fuel Trap Report**

- Poor countries burdened with heavy debts are compelled to rely on fossil fuels to generate revenue for repaying loans from richer nations, highlights the Debt-Fossil Fuel Trap report.
- The Debt-Fossil Fuel Trap report has been released by the anti-debt campaigner’s Debt Justice and partners in affected countries.

**Findings of the Report “The Debt-Fossil Fuel Trap”:**

- Fossil fuel extraction is seen as a means to generate revenue and alleviate debt for countries in the global south
- Example of Suriname: Resource-Based Loans: Creditors are entitled to 30% of oil revenue until 2050, incentivizing continued oil exploitation.
- Argentina supports fracking in Vaca Muerta (Northern Patagonia) to ease the debt crisis.
- Revenues from fossil fuel projects often fall short of expectations, leading to further debt.
- External debt payments for global south countries have risen by 150% between 2011 and 2023, reaching a 25-year high
- 54 countries in a debt crisis, cutting public spending during the pandemic to repay loans
- Extreme weather events force countries to borrow more money for adaptation and mitigation efforts.
- For instance, Dominica’s debt as a percentage of GDP rose from 68% to 78% after Hurricane Maria hit the island in 2017.

**The report recommends the following actions to address the issues highlighted:**

Recommendations	Description
<b>Ambitious Debt Cancellation</b>	Implement comprehensive debt cancellation for countries in need, across all creditors, without imposing economic conditions.
<b>Transition to Clean Energy</b>	Encourage the adoption of clean and renewable energy sources to reduce dependency on fossil fuels.
<b>Wealthy Government Support</b>	Wealthy governments and institutions should play a role in supporting countries to exit the debt-fossil fuel trap.
<b>Sustainable Development</b>	Promote sustainable development strategies that prioritize environmental protection and economic stability.
<b>Ethical Investment</b>	Ensure that financing and investments align with environmental and social sustainability, rather than contributing to fossil fuel dependence.
<b>Equitable Financing</b>	Offer fair and just financing terms that do not exacerbate debt burdens or perpetuate reliance on fossil fuels.

**3.10 India’s protectionist Industrial Policy**

The author discusses India’s protectionist policies in manufacturing and electronics, contrasting them with targeted approaches in the US and EU.

### What meaning of Protectionist measures?

- It refers to economic policies and actions taken by a country to protect its domestic industries, businesses, and workers from foreign competition.
- These measures can include tariffs, quotas, subsidies, and other barriers that make imported goods more expensive or difficult to access, thereby promoting domestic production and consumption.
- The goal is to shield domestic industries from foreign competition and support local economic growth.

### Issues with India's Protectionist Measures:

Issues	Description
<b>High Tariffs</b>	Import restrictions and high tariffs on electronic goods like laptops and tablets, make tariffs the highest among competing economies.
<b>Broad Protectionism</b>	Protective measures spanning <b>14 sectors</b> , some lacking a clear strategic basis (e.g., textiles, food processing).
<b>Challenges in the Electronics Sector</b>	Rapid technological changes in the electronics sector make domestic manufacturing keeping pace with global advancements a challenge.
<b>Lack of Targeted Strategies</b>	India's industrial policy lacks targeted sector-specific strategies, unlike the US and EU's approaches.
<b>Missed Opportunity</b>	Failure to fully integrate with global value chains can hinder competitiveness and growth in certain sectors.
<b>Trade Barriers for Innovation</b>	<b>Excessive protectionism</b> can hinder exposure to global competition and restrict innovation and efficiency.
<b>Limited Focus on Technological Advancement</b>	India's policy may not prioritize technological advancement, putting it at a disadvantage in rapidly evolving industries.

### How other countries are applying protectionist measures?

- US: The US has introduced the CHIPS and Science Act to boost domestic research and manufacturing in semiconductors and electric vehicles. This initiative aims to reduce reliance on countries like China and Russia and enhance "strategic autonomy." The US-Mexico-Canada Agreement (USMCA) also promotes regional economic integration.
- EU: The EU's Green Deal Industrial Plan aims for carbon neutrality by 2050. The Carbon Border Adjustment Mechanism (CBAM) taxes imports from high carbon-output sectors, affecting major exporters like China and Russia. The EU's approach focuses on environmental sustainability.
- Both the US and EU use selective protectionist measures. The US emphasizes technological advancement and reducing geopolitical risks, while the EU targets environmental sustainability. Their strategies have specific goals, unlike India's broader approach.

### What should India do?

- Embrace Open Trade in Electronics: Rapid technological changes in the electronics sector make import substitution difficult. Given global value chains and the success of top exporters as importers, India should adopt open trade policies for smoother cross-border transactions.
- Learn from Asian Economies: China and Vietnam's success in the electronics sector stems from open trade policies. China's dual trade regime, allowing duty-free entry for components, boosted exports. India could benefit by adopting similar strategies.
- Combine Incentives with Trade Liberalization: Following countries like South Korea, India should merge financial incentives with trade liberalization. Shifting from import substitution to export expansion can

enhance competition, efficiency, and innovation.

- The Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry, is working on a new industrial policy. This will be the third industrial policy (after 1956 and 1991), which is likely to replace the 1991 policy, which was prepared against the backdrop of the balance of payment crisis.

### 3.11 Rail-Sea-Rail (RSR) Initiative

- The Ministry of Coal is driving a transformative initiative known as Rail-Sea-Rail (RSR) to revolutionize coal transportation in India.
- This strategy integrates rail and sea transportation to create an efficient movement of domestic coal, connecting mining sites, ports, and end-users.
- The goal is to enhance logistical efficiency, reduce transportation costs, and reshape the coal transportation landscape.

#### Stats regarding Coal:

- Major coal-producing states like Odisha, Chhattisgarh, Jharkhand, and parts of Madhya Pradesh contributed around 75% of domestic raw coal dispatch in FY'23.
- The Ministry envisions doubling India's coal production by FY'30, with a projected Compound Annual Growth Rate (CAGR) of approximately 7.7%.
- Currently, railways handle about 55% of coal evacuation, with a target of increasing it to 75% by FY'30. The committee is promoting RSR coal evacuation with the aim of reaching 112 million tons by 2030, a significant increase from the current 40 million tons. This approach aims to reduce congestion, explore export opportunities, and minimize the carbon footprint.

#### Benefits of RSR Initiative:

- The Rail-Sea-Rail initiative aims to transform logistics through an eco-friendly coastal shipping mode.
- Opting for RSR could result in substantial cost savings for end-users in Southern India, potentially cutting logistics costs.
- Over the past four years, Rail-Sea-Rail coal transportation has seen impressive growth of around 125%.
- The Ministry of Coal is committed to refining its Rail-Sea-Rail Coal Evacuation strategy to meet the nation's growing energy needs and establish a robust energy supply system.

### 3.12 High Youth Unemployment in India

Despite being the fastest-growing large economy, India faces the challenge of high youth unemployment alongside economic growth.

#### What is unemployment?

- Unemployment is a situation when a person actively searches for a job and is unable to find work. Unemployment indicates the health of the economy.
- According to the latest annual Periodic Labour Force Survey (PLFS), released by the National Statistical Office (NSO), India's unemployment rate in July 2021-22 to 4.1%

#### Reason for High Unemployment in India Despite High Economic Growth:

- Lop-Sided Development Policies: India's growth and unemployment coexist due to imbalanced policies that create fewer jobs for new labour force entrants.
- Demographic Composition: Over 50% of India's population is below 25, and over 65% is below 35. Despite high growth, job creation hasn't kept pace with this demographic.
- Less Focus on Human Infrastructure: India's progress in physical infrastructure hasn't been matched in education and skills. The absence of strong human infrastructure limits job growth.
- Shift to Rural Manufacturing: Urban-centric physical infrastructure investments conflict with

manufacturing's move to rural areas for cost competitiveness.

- Constrained Growth in Rural Areas: Poor physical and human infrastructure in rural areas hinders growth drivers and limits the size of the manufacturing sector.

#### **What is Human Infrastructure?**

- Human infrastructure refers to the development and investment in the education, skills, and capabilities of a population. It encompasses efforts to improve literacy, vocational training, healthcare, and other factors that enhance the human capital and productivity of a society.

#### **Importance of Investing in Human Infrastructure:**

- High Returns: Education investment yields higher returns than physical investment. Social returns for primary education are around 20%, and returns for higher education are increasing.
- Job Creation Acceleration: Education investments accelerate job creation. New enterprises, both domestic and foreign, seek skilled workers and strong physical infrastructure.
- Youth Advantage: India's sizable youth population can significantly benefit from education, aligning with the needs of new enterprises.

#### **Recommendations:**

- Address Lop-Sided Development Policies
- Improve Rural Human Infrastructure
- Scale Up Tertiary Education
- Promote Tier II Cities: The focus of economic growth should shift to Tier II cities, where new job opportunities and GDP growth can be generated.
- Address Urbanization and De-Industrialization Divergence: Policymakers need to consider rural structural transformation that includes not only agricultural productivity but also the manufacturing sector.
- Integrate Human and Physical Infrastructure: To overcome the limitations of poor physical and human infrastructure in rural areas, a comprehensive approach that aligns both aspects is necessary for sustainable job growth.

#### **Conclusion:**

- The challenges posed by the coexistence of high economic growth and high unemployment can be overcome by scaling up investments in both physical and human infrastructure, bridging the gap between urban and rural areas in India.

### **3.13 'Future of Work: State of Work @ AI' report**

As per LinkedIn's first ever global 'Future of Work: State of Work @ AI' report, Indian professionals are rapidly acquiring AI skills in response to the growing prominence of Artificial Intelligence in the workplace, with the number of AI-skilled individuals increasing 14 times since 2016

#### **Key Findings:**

- India is among the top five countries in terms of AI talent growth, along with Singapore, Finland, Ireland, and Canada.
- AI Skills Index value highlights the significant increase in members with at least 2 AI skills on their profiles compared to January 2016.
- Recognition among 60% of workers and 71% of Gen Z professionals in India that acquiring AI skills could enhance their career prospects.
- 2 out of 3 Indians plan to learn at least one digital skill in 2023, with AI and Machine Learning being among the top skills of interest.

Positives of AI at the Workplace	Negatives of AI at the Workplace
Efficiency and Productivity	Fear of Job Displacement
<p><b>Data Analysis and Insights:</b> AI can analyze large datasets quickly and extract valuable insights for better decision-making.</p>	<p><b>Privacy Concerns:</b> The use of AI may involve the collection and analysis of personal data, raising concerns about privacy and data security</p>
<p><b>Improved Customer Experience:</b> AI-powered chatbots and virtual assistants enhance customer support by providing instant and accurate responses.</p>	<p><b>Bias and Fairness Issues:</b> AI algorithms can inherit biases present in the data they are trained on, leading to discriminatory outcomes</p>
<p><b>Innovation and New Opportunities:</b> AI drives innovation by enabling the development of new products, services, and business models.</p>	<p><b>Skill Gap and Training:</b> There may be a gap in required skills as jobs evolve, necessitating continuous training and upskilling</p>
<p><b>Cost Savings and ROI:</b> Implementing AI technologies can lead to cost savings and higher return on investment in the long run.</p>	<p><b>Ethical Dilemmas:</b> AI applications raise ethical concerns regarding transparency, accountability, and the potential misuse of technology.</p>



## 4. Science & Technology

### 4.1 Draft National Deep Tech Startup Policy (NDTSP)

- The National Deep Tech Startup Policy (NDTSP) draft has been released for public consultation by the National Consortium.
- Aim of the policy: To strengthen the Indian deep tech startup ecosystem and address its unique challenges.

#### What are Deep Techs?

- Deep Tech refers to advanced and cutting-edge technologies that are based on significant scientific and engineering innovations.
- Example: Artificial Intelligence (AI) and Machine Learning (ML) are examples of Deep Tech. They involve the development of sophisticated algorithms and models that enable machines to learn from data and make intelligent decisions.

#### Status:

- India currently boasts the third largest startup ecosystem in the world with more than 326 incubators and accelerators. About 14% of them are in the area of Deep Tech.

#### Draft NDTSP is based on the following themes:

- Nurturing Research, Development & Innovation
- Strengthening the Intellectual Property Regime
- Facilitating Access to Funding
- Enabling Shared Infrastructure and Resource Sharing
- Creating Conducive Regulations, Standards, and Certifications
- Attracting Human Resources & Initiating Capacity Building
- Promoting Procurement & Adoption
- Ensuring Policy & Program Interlinkages
- Sustaining Deep Tech Startups
- Significance: This policy complements and adds value to the existing Startup India policies, programmes and initiatives, by fostering a conducive ecosystem for deep tech startups to thrive and address their unique and complex challenges.

#### About National Consortium:

- The National Consortium is an apex-level body set up on the recommendation of the Prime Minister's Science, Technology, and Innovation Advisory Council (PM-STIAC) to propose a comprehensive policy framework for the Indian deep tech startup ecosystem.
- Chaired by the Principal Scientific Adviser to the Government of India, it represents a diverse group of stakeholders, including high-level representatives from various government departments, industry associations, research institutions, and innovation centres.

#### About PM-STIAC:

- It is an overarching body which assesses the status of specific S&T domains, comprehends challenges, formulates immediate, mid and long-term interventions and presents a roadmap to the Prime Minister. It has identified nine national science missions which aim to address major scientific challenges to ensure India's sustainable development.

## 4.2 New blood testing technology called GEMINI

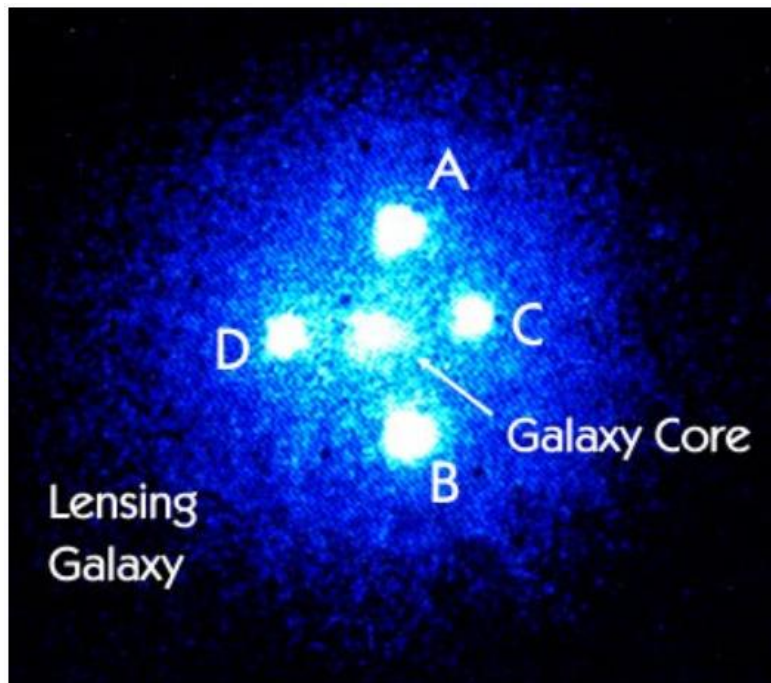
- Researchers have developed a new blood testing technology called GEMINI (Genome-wide Mutational Incidence for Non-Invasive Detection of Cancer) that uses genome-wide sequencing of single molecules of DNA combined with machine learning.
- This technology has the potential to enable earlier detection of lung and other cancers.

### How it works?

- The GEMINI test starts by collecting a blood sample from individuals at risk of cancer. From this sample, cell-free DNA (cfDNA) shed by tumours is sequenced using cost-efficient whole genome sequencing. Single molecules of DNA are analyzed for sequence alterations, providing mutation profiles across the genome.
- A machine learning model then identifies changes in cancer and non-cancer mutation frequencies, generating a score indicating the likelihood of having cancer.
- In laboratory tests, the GEMINI test, when combined with computerized tomography imaging, detected over 90% of lung cancers, including early-stage diseases. The test also identified altered mutation profiles in cfDNA from patients with other cancers, such as liver cancer, melanoma, and lymphoma, suggesting broader applications.
- cfDNA stands for “cell-free DNA.” It refers to small fragments of DNA that are released into the bloodstream or other bodily fluids when cells in the body die and break down. These fragments of DNA are not enclosed within cells, hence the term “cell-free.”

## 4.3 Einstein cross

- Astronomers have discovered a rare example of an “Einstein cross,” a phenomenon predicted by Albert Einstein in 1915.
- In this case, a foreground elliptical galaxy, located around 6 billion light-years from Earth, has distorted and split a beam of light from a background galaxy about 11 billion light-years away.
- The result is a pattern of four blue smudges around the orange glow of the foreground galaxy.
- The background light likely originates from a quasar, a young galaxy with a supermassive black hole at its core emitting intense radiation.



- Einstein’s theory of general relativity explains how massive objects warp space-time, and the strong gravity of the foreground galaxy curved the light from the quasar, creating the Einstein cross pattern.

#### 4.4 IMS-1 Satellite Bus Technology

- ISRO has transferred its IMS-1 Satellite Bus Technology to Alpha Design Technologies Pvt Ltd., promoting private industry participation in India's space sector.
- NewSpace India Limited (NSIL), ISRO's commercial arm, facilitated the technology transfer.

##### What is IMS-1 Satellite Bus Technology?

- IMS-1 Satellite Bus is a platform developed by ISRO for cost-effective space access. It serves as a versatile vehicle for payloads, enabling tasks like Earth imaging, space science, and remote sensing. Weighing around 100 kg and carrying up to 30 kg payload, it features solar arrays generating 330 watts of power and provides accurate pointing capabilities.

##### Significance:

- The transfer marks the first instance of ISRO's satellite bus technologies being shared with private companies.
- This move aims to boost India's industrial growth, promote technological self-reliance, and encourage private sector participation in space research and exploration.

#### 4.5 STEREO (Solar TERrestrial RELations Observatory) mission

- The STEREO (Solar TERrestrial RELations Observatory) mission launched twin spacecraft, STEREO-A and STEREO-B, in 2006, to study the Sun.
- This mission achieved several milestones, including capturing the Sun as a complete sphere for the first time by reaching a 180-degree separation in their orbits.
- STEREO-A's recent approach to Earth offers a unique opportunity for scientific observations. By combining its views with other spacecraft, including the Solar and Heliospheric Observatory (SOHO) and Solar Dynamics Observatory (SDO), STEREO-A will provide 3D views of the Sun.
- This stereoscopic vision allows scientists to gain depth perception and explore features like active regions and coronal loops in unprecedented detail.
- STEREO-A's passage through Earth's vicinity also allows for an in-depth study of solar eruptions, known as coronal mass ejections (CMEs), which can impact Earth's technology.
- This approach provides multipoint measurements to understand the evolution of CMEs' magnetic fields. Additionally, as solar activity increases towards the predicted solar maximum in 2025, STEREO-A's observations will shed light on the changes in the Sun's behaviour during different phases of its cycle.

#### 4.6 DRDO's UAV Tapas

- Defence Research and Development Organisation (DRDO) announced that there were no casualties or collateral damage resulting from the crash of the Tapas unmanned aerial vehicle (UAV) during an experimental flight trial in Karnataka, India.
- The UAV was undergoing a trial flight from ATR Challakere when it encountered a technical snag and crashed in nearby farmland. DRDO assured that investigations into the technical issue are ongoing.

##### About TAPAS UAV:

- The Tapas UAV, previously known as Rustom-2, is a Tactical Airborne Platform for Aerial Surveillance-Beyond Horizon-201. It's a long-endurance drone developed by the Aeronautical Development Establishment in India.
- With a wingspan of 20.6 meters and a top speed of 225 kmph, the drone can cover a range of over 250 km using the C Band frequency data link developed by DRDO.
- The UAV has the capability to fly autonomously or via remote control, making it suitable for pre-programmed missions. It boasts a compact and lightweight design, allowing for easy transport and deployment in various environments.

- The drone's real-time data collection and transmission capabilities provide valuable intelligence for decision-making. It has an impressive flight endurance of several hours and can operate in both daylight and darkness.

#### 4.7 ISRO and Chandrayaan-3 mission

The Chandrayaan-3 mission's successful soft landing on the Moon marks India's significant achievement, becoming the fourth nation in history to reach the lunar surface.

##### Historical overview of ISRO's major programs – satellites, launch vehicles, and planetary exploration.

Program	Key Achievements
<b>Satellite Programs</b>	
<b>Aryabhata (1975)</b>	Marked India's entry into space era; conducted experiments in X-ray astronomy, aeronomics, and solar physics.
<b>Bhaskar-1 &amp; Bhaskar-2</b>	Experimental remote-sensing satellites laying the groundwork for Indian Remote Sensing (IRS) Satellite system.
<b>IRS-1A (1988)</b>	Launched Earth Observation spacecraft aiding land-based applications like agriculture, forestry, etc.
<b>INSAT Series</b>	Initiated communication revolution, providing nationwide connectivity, broadcasting, meteorological info, etc.
<b>IRNSS (NavIC) (2013)</b>	Started for terrestrial, aerial, marine navigation, location-based services, etc.
<b>Launch Vehicle Programs</b>	
<b>1963 Nike Apache</b>	Initial rocket launch; 'sounding rocket' experiment.
<b>SLV-3 (1980)</b>	India's first launch vehicle; entry into space-faring nations.
<b>PSLV</b>	Reliable and versatile workhorse; enabled critical space missions.
<b>GSLV</b>	Addressed PSLV's limitations; introduced cryogenic engines.
<b>GSLV Mk-III</b>	Heaviest launch vehicle; used for Chandrayaan-2 and Chandrayaan-3 missions.
<b>Planetary Exploration</b>	
<b>Chandrayaan-1 (2008)</b>	Detected water on the Moon; the fifth country to reach the lunar surface.
<b>Mangalyaan (2013)</b>	First interplanetary mission; reached Mars orbit, showcasing interplanetary technology.
<b>Chandrayaan-2 (2019)</b>	Aimed for lunar exploration but faced a setback with the lander's soft landing.
<b>Chandrayaan-3 (2023)</b>	Achieved a successful soft landing on the Moon, contributing to India's lunar capabilities.

### **Challenges of landing on the Moon's South Pole:**

- Challenges are primarily due to the difficult terrain, extreme temperatures, and areas of permanent shadow. Unlike previous spacecraft that landed near the lunar equator, the South Pole presents greater difficulties with its rugged landscape, extreme cold, and regions that never receive sunlight.

### **However, despite these challenges, ISRO is interested in exploring the Moon's South Pole for several important reasons:**

- **Water Resources:** The South Pole region is believed to contain significant amounts of water molecules, potentially trapped as ice in shadowed craters.
- **Confirming the presence of water is crucial for planning future human missions and utilizing lunar resources.**
- **Scientific Discoveries:** The harsh environment and the existence of permanently shadowed areas offer a unique window into the Moon's history and the early Solar System.
- **Studying this region can provide valuable insights into the origins and evolution of celestial bodies.**
- **Clues to Earth's History:** The Moon is thought to have formed from the debris of a massive impact between a Mars-sized object and early Earth.
- **Exploring the lunar South Pole can shed light on the materials and conditions that existed during this critical event.**
- **Global Collaborations:** Successful collaborations between ISRO and NASA have previously confirmed the presence of water on the Moon.
- **Partnerships like the Indo-Japan LUPEX mission aim to explore the South Pole further, with plans to send a lander and rover by 2024.**
- **Technological Advancements:** Undertaking missions to the lunar South Pole allows ISRO to develop and showcase innovative technologies. This includes advancements in soft landing techniques, navigation systems, resource utilization, and long-duration operations that can have broad applications in future space missions.

### **Instruments and Experiments on Chandrayaan 3:**

#### **Lander Experiments:**

- **Radio Anatomy of Moon Bound Hypersensitive Ionosphere and Atmosphere (RAMBHA):** This experiment studies the electrons and ions near the moon's surface, investigating their behaviour and changes over time.
- **Chandra's Surface Thermo Physical Experiment (ChaSTE):** ChaSTE focuses on the thermal properties of the lunar surface near the polar region, contributing to our understanding of temperature variations.
- **Instrument for Lunar Seismic Activity (ILSA):** ILSA measures lunar quakes near the landing site, analyzing the composition of the Moon's crust and mantle through seismic activity.
- **LASER Retroreflector Array (LRA):** This passive experiment, provided by NASA, acts as a target for lasers, enabling precise measurements for future missions.

#### **Rover Experiments:**

- **LASER-Induced Breakdown Spectroscope (LIBS):** LIBS determines the chemical and mineral composition of the lunar surface, offering insights into its geological makeup.
- **Alpha Particle X-ray Spectrometer (APXS):** APXS identifies elements like magnesium, aluminium, silicon, and more in the lunar soil and rocks, contributing to our understanding of lunar materials.

## **4.8 Indigenous ASTRA Beyond Visual Range air-to-air missile**

- The Light Combat Aircraft (LCA) LSP-7, known as "Tejas," successfully launched the indigenous Beyond Visual Range (BVR) air-to-air missile called ASTRA.
- The missile was fired from the aircraft at an altitude of approximately 20,000 feet and achieved all test objectives flawlessly.

- The test was closely supervised by the Aeronautical Development Agency (ADA), Defence Research and Development Organisation (DRDO), Hindustan Aeronautics Limited (HAL), Centre for Military Airworthiness and Certification (CEMILAC), and Directorate General of Aeronautical Quality Assurance (DG-AQA).

**About ASTRA:**

- ASTRA is an advanced BVR air-to-air missile developed by various DRDO laboratories, including the Defence Research and Development Laboratory (DRDL) and Research Centre Imarat (RCI).
- It's designed to engage and destroy agile supersonic aerial targets.

## 5. Environment & Ecology

### 5.1 NITI Aayog: Towards Decarbonising Transport 2023

NITI Aayog released the “Towards Decarbonising Transport 2023” report to support global discussions on sustainable transport during India’s G20 presidency.

#### What is Decarbonising Transport?

- Decarbonising Transport refers to the process of reducing or eliminating carbon dioxide (CO<sub>2</sub>) and other greenhouse gas emissions from the transportation sector.
- Examples: Promoting electric vehicles, using alternative fuels, improving energy efficiency, and investing in public transport and active mobility.

#### Status of emission from the transport sector:

- As of 2021, the transport sector in India contributes to around 14-15% of the country’s total greenhouse gas emissions.
- Within the transport sector, road transport contributes to more than 90% of the total CO<sub>2</sub> emissions.
- India has the target to achieve net-zero emissions by 2070.

#### Key Highlights of the Report:

- India has still no overall emissions or energy targets for the transport sector
- India’s transport-sector emissions could increase 65% by 2030 and 197% by 2050 (from 2020 levels)
- Contributors: Road > Rail transport

#### Initiatives taken by India:

- Bharat Stage VI Emission Standards
- Forum for Decarbonizing Transport in India by NITI Aayog and WRI India
- FAME India (part of the National Electric Mobility Mission Plan)
- National Electric Mobility Mission Plan
- Incentives under the Production Linked Incentive scheme
- Decarbonising Transport initiative of the ITF: Promotes carbon-neutral mobility to help stop climate change.

#### Conclusion:

- India needs to have a comprehensive policy to decarbonize the transport sector to meet its nationally determined contributions (NDCs) i.e., reduce emissions intensity of its GDP by 45% by 2030

### 5.2 Plastic Overshoot Days

In 2023, India experienced 157 days of plastic overshoot, which means that the country generated and accumulated a significant amount of plastic waste that exceeded its waste management capacity. Also, in another news, a recent report highlights that India is one of the 12 countries accountable for 52% of the global mismanaged plastic waste, alongside nations like China, Brazil, Indonesia, and the United States.

#### What is Plastic Overshoot Day?

- Plastic Overshoot Day marks the point in a year when the amount of plastic waste generated exceeds the capacity to properly manage and dispose of it. It signifies a tipping point where the world accumulates more plastic waste than can be effectively handled by waste management systems.
- World’s first Plastic Overshoot Day on July 28, 2023, was marked recently.



### Status of Plastic (as per the Report):

- India has Mismanaged Waste Index (MWI) (ratio of the mismanaged waste and the total waste) of over 98%
- India categorized as 'The Waste Sponges': It contributed a staggering over 73 lakh ton of mismanaged plastic waste in 2023
- India has a relatively low annual per capita plastic consumption of 5.3 kg (USA has 221 kg)
- 1.33 % of its total plastic waste was imported, while the country exported 0.8 % of its total waste
- India will contribute an average of 16.7 days of plastic overshoot to the environment in 2023.

### Initiatives by India:

- 1000 Cities to become 3-Star Garbage Free by October 2024
- Mission LiFe
- Plastic Waste Management Rule
- Ban on single use of plastics
- 'Beat Plastic Pollution' campaign to maintain the cleanliness and environmental integrity of the state's beaches (by Kerala Government)

### Global Initiatives (for microplastics):

- Global Partnership on Marine Litter (GPML)
- GloLitter Partnerships Project
- London Convention, 1972

## 5.3 Western Tragopan

The Western Tragopan, Himachal Pradesh's state bird, has been facing habitat loss, but efforts at a conservation breeding centre, have resulted in a gradual increase in the bird's population.

### About Western Tragopan:

- IUCN Status: Vulnerable; CITES– Appendix I.
- The bird's distribution ranges from North Pakistan to India, including Himachal Pradesh and parts of Uttarakhand.
- The Western Tragopan faces threats from habitat loss, anthropogenic disturbances, and hunting pressure.



## 5.4 India's first captive breeding success story in Assam Zoo

- In 2011-2012, Himalayan vultures were saved from poisoning incidents in Assam. Despite doubts from veterinarians about surviving the hot and humid weather, most survived and contributed to India's first successful captive breeding of Himalayan vultures at Assam State Zoo.

- Usage: The example can be used in environment conservation questions.

### About Himalayan vultures

- The Himalayan Griffon vulture, also known as the Himalayan Vulture, is found in the Himalayas and Tibetan Plateau. It ranges from western China to central China and Mongolia, with the ability to fly at altitudes of up to 5,500 meters. It's classified as Near Threatened by the IUCN.

### 5.5 5% of birds in India are endemic

- A recent publication by the Zoological Survey of India (ZSI) reveals that 5% of India's bird species are endemic, meaning they are unique to the country and not found elsewhere.
- Titled "75 Endemic Birds of India," the publication was released on the 108th foundation day of the ZSI. Out of India's total of 1,353 bird species, 78 (5%) are endemic to the country.

### Key Findings:

- Three of these species have not been spotted in decades: the Manipur Bush Quail, the Himalayan Quail, and Jerdon's Courser.
- The Western Ghats have the highest number of endemic species, with 28 recorded.
- The Andaman and Nicobar Islands also have significant endemism, hosting 25 bird species unique to the region.
- The publication sheds light on the conservation status of these endemic species, with 25 classified as 'Threatened' by the IUCN, and a few listed as 'Critically Endangered,' 'Endangered,' 'Vulnerable,' or 'Near Threatened.'

### 5.6 WMO: 2022 State of the Climate in Asia Report

The World Meteorological Organisation (WMO) has come up with its 2022 State of the Climate in Asia report, indicating that in 2022, Asia experienced extreme climate events, including high temperatures, droughts, floods, and cyclones, leading to significant socioeconomic impacts.

### Key points of the Report are:

Points	Examples and Impacts
<b>Global Climate</b>	<ul style="list-style-type: none"> <li>• <b>The annual mean near-surface temperature</b> in 2022 was <b>1.15 °C</b> above pre-industrial average</li> <li>• <b>Ocean heat content</b> reached a new high</li> <li>• <b>Global mean sea level</b> reached a new high due to ocean warming and ice sheet loss.</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>• 2022 had the <b>second or third-highest mean surface temperature</b> on record</li> <li>• <b>Northern Siberia, Central Asia, and Western China</b> experienced above-average temperatures</li> </ul>
<b>Precipitation</b>	<ul style="list-style-type: none"> <li>• Regions in Iraq, <b>Ganges-Brahmaputra Rivers</b>, Korean Peninsula faced precipitation deficits</li> <li>• <b>South Pakistan, Southeast Asia</b>, and northeast China experienced excessive rainfall</li> <li>• <b>Central India and the Himalayas</b> recorded high precipitation</li> <li>• <b>Floods in Pakistan and India</b> displaced millions and damaged agriculture.</li> </ul>
<b>Glaciers</b>	<ul style="list-style-type: none"> <li>• 23 glaciers in <b>High Mountain Asia</b> showed a continued mass reduction</li> <li>• <b>Urumqi Glacier No 1 in Tien Shan</b> had the second most negative mass balance in 2021-22 (see explanation down)</li> </ul>

<b>Extreme Events: Cyclones</b>	<ul style="list-style-type: none"> <li>· <b>25 tropical cyclones</b> formed in the western North Pacific Ocean and the South China Sea</li> <li>· <b>The Nanmadol typhoon</b> affected Japan, causing evacuation, deaths, and economic damage.</li> </ul>
<b>Floods</b>	<ul style="list-style-type: none"> <li>· Severe floods in Pakistan <b>displaced 14% of the population</b>, causing deaths and displacements.</li> <li>· Heavy monsoon affected <b>Northeast India and Bangladesh</b>, causing deaths and destruction</li> <li>· Floods were <b>India's worst natural disaster in 2022</b></li> </ul>
<b>Droughts</b>	<ul style="list-style-type: none"> <li>· <b>The Yangtze River basin in China</b> experienced the worst drought in six decades, impacting crops, energy, and economy</li> <li>· <b>Iran faced its third consecutive year of drought</b>, leading to decreasing water bodies and economic loss.</li> </ul>
<b>Economic Impact</b>	<ul style="list-style-type: none"> <li>· <b>Floods in Pakistan, China, and India</b> caused economic losses exceeding the average observed over 20 years</li> <li>· <b>Droughts in China and Iran</b> resulted in significant economic damages</li> <li>· <b>Cyclones and storms</b> led to milder economic losses compared to previous years.</li> </ul>

#### What is “Negative mass balance” for glaciers?

- It refers to a situation in which the amount of ice or snow lost from a glacier or ice sheet through melting, sublimation, or other processes exceeds the amount of new ice or snow accumulation. In other words, the glacier is losing more mass than it is gaining, resulting in a decrease in its overall size and volume over time.

#### About World Meteorological Organization:

- The World Meteorological Organization (founded 1950; HQ: Geneva; Parent organization: United Nations Economic and Social Council) is a specialized agency of the United Nations responsible for promoting international cooperation on atmospheric science, climatology, hydrology and geophysics.

### 5.7 Tidal energy potential

- The Standing Committee on Energy, through a newly presented report in the Indian Parliament, has requested the Union Ministry of New and Renewable Energy (MNRE) to update them on initiatives and outcomes regarding the assessment of tidal, wave, and thermal energy potential in India.
- The committee discussed and adopted the 20th report titled “Tidal Power Development in India”.
- The potential for tidal and wave power in India is estimated to be 12,455 Megawatts (MW) and 41,300 MW, respectively. However, this potential is largely theoretical and not necessarily practically exploitable. Ocean thermal energy potential has not been estimated yet.

#### About Tidal Energy:

- Tidal Energy is a form of power produced by the natural rise and fall of tides caused by the gravitational interaction between the Earth, the sun, and the moon.
- There are currently three different ways to get tidal energy: Tidal barrages (dam-like structures), Tidal lagoons (partly enclosed barrier), and a Tidal stream (fast-flowing body of water created by tides)

### 5.8 Belem Declaration

- Leaders from eight Amazonian countries, including Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru,

Suriname, and Venezuela, were unable to reach an agreement on the protection of the Amazon rainforest during the Amazon Summit organized by the Amazon Cooperation Treaty Organization (ACTO).

- The goal proposed by Colombia to protect 80% of the Amazon from deforestation and degradation by 2025 did not garner unanimous support.
- The leaders focused on initiating a dialogue about the sustainability of mining and fossil fuel-related activities but failed to commit to stopping oil drilling in the region.
- This lack of consensus has implications for global biodiversity goals, including those set under the Convention on Biological Diversity's Global Biodiversity Framework in 2022, where countries agreed to protect 30% of land and sea by 2030.

#### **About Belem Declaration:**

- The Belem Declaration is a statement released during the Amazon Summit, involving leaders from Amazon countries.
- It emphasizes the importance of Indigenous knowledge for biodiversity conservation and calls for Indigenous Peoples' participation in decision-making.
- The declaration promotes sustainable forest use and diverse economic solutions, addressing concerns about deforestation and degradation in the Amazon region.
- It also underlines the need to protect land rights to prevent deforestation and preserve biodiversity within Indigenous territories.

### **5.9 Sixth Anniversary of Minamata Convention**

The Minamata Convention on Mercury, which marks its sixth anniversary, is a significant global agreement aimed at safeguarding people and the environment from the harmful impacts of mercury exposure.

#### **About Mercury:**

- Mercury is a naturally occurring element that is found in air, water and soil.
- It may have toxic effects on the nervous system, thyroid, kidneys, lungs, immune system, eyes, gums and skin.

#### **About the Minamata Convention:**

- The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury and its compounds.
- It was agreed at the fifth session of the Intergovernmental Negotiating Committee in Geneva, Switzerland 2013. It entered into force in 2017.
- Controlling the anthropogenic releases of mercury throughout its lifecycle is one of the key obligations under the Convention.
- The Convention also addresses interim storage of mercury and its disposal once it becomes waste, sites contaminated by mercury as well as health issues.
- India has ratified the Convention.

### **5.10 Green Hydrogen**

- Ministry of New and Renewable Energy (MNRE) in India has introduced the Green Hydrogen Standard for the country as part of the National Green Hydrogen Mission.
- The Ministry has defined Green Hydrogen as hydrogen with a well-to-gate emission (including various production processes) of no more than 2 kg CO<sub>2</sub> equivalent per kg of hydrogen.
- This standard specifies the emission limits that hydrogen production must adhere to in order to be classified as 'Green', indicating it comes from renewable sources.
- The standard covers both electrolysis-based and biomass-based methods of producing hydrogen.
- The standard also outlines that the Ministry will provide a detailed methodology for the measurement, reporting, monitoring, verification, and certification of green hydrogen and its derivatives.

- The Bureau of Energy Efficiency (BEE), under the Ministry of Power, will be responsible for accrediting agencies to monitor, verify, and certify Green Hydrogen production projects.

### 5.11 11st hydrogen bus in Leh

India's largest power producer, NTPC Ltd, has begun a trial run of its first hydrogen bus in Leh as part of the Green Hydrogen Mobility Project.

#### The programme:

- This initiative aims to achieve carbon-neutral status for Ladakh. NTPC plans to establish a hydrogen fuelling station, and a solar plant, and deploy five fuel cell buses for intracity routes in Leh.
- Notably, these buses are designed to operate in sub-zero temperatures and high-altitude conditions.
- NTPC Limited (founded 1975; HQ: New Delhi; Maharatna Company) is a major Indian Central Public Sector Undertaking owned by the Ministry of Power and the Indian Government.

### 5.12 Solution to minimize heatwaves in Urban India

The study conducted by the Centre for Science and Environment (CSE) explores the impact of different urban forms on heat resilience.

#### Key findings and recommendations include:

- Morphology Influence: Areas with open highrise, open midrise, and compact midrise urban morphologies show lower land surface temperatures (LST), indicating better heat resilience.
- Low-rise areas with sparse vegetation tend to have higher LST.
- Blue/Green Infrastructure: Greenery, like trees, shrubs, and grass, enhances microclimates. Effective vegetation cover (EVC) reduces LST; trees with thick foliage are more effective.
- Floor Space Index (FSI): Higher FSI correlates with lower LST. Increased FSI results in decreased temperatures.
- Street Orientation: North-south-oriented streets have higher LST due to sun exposure, offering guidelines for urban planning.
- Cooling Solutions: Different urban forms can have distinct zoning regulations for heat resilience, such as shaded walkways, cool roofs, and high EVC.
- Adapting Urban Plans: Cities should amend building by-laws and master plans based on factors influencing heat gain.
- Impact on Energy Consumption: A 1°C temperature decrease can lead to a 2% reduction in the city's power consumption.

### 5.13 "State of India's Birds, 2023" report

The "State of India's Birds, 2023" report reveals a widespread decline in most bird species across the country, with some currently declining and others projected to decline in the future.

#### Key Findings:

- Raptors, migratory shorebirds, and ducks have experienced the most significant declines.
- However, several species like the Indian Peafowl, Rock Pigeon, Asian Koel, and House Crow are thriving and increasing in both abundance and distribution.
- The assessments, based on data from around 30,000 birdwatchers, indicate that 60% of the 338 species with identifiable long-term trends have declined, while 36 species have increased.
- Specialist bird species, which inhabit specific habitats like wetlands and rainforests, are facing rapid declines, while generalist species capable of adapting to various habitats are faring better.
- Long-distance migratory birds, such as those from Eurasia and the Arctic, have suffered significant

declines, while resident species remain more stable.

- Birds with diets focused on vertebrates and carrion have seen notable declines, potentially due to harmful pollutants present in these food resources.
- The report emphasizes the decline of species endemic to the Western Ghats and Sri Lanka biodiversity hotspots.

**The main threats to birdlife in India highlighted in the report include:**

- Climate Change
- Urbanization
- Monocultures
- Energy Infrastructure

## 6. Security issues

### 6.1 Akira ransomware

- The Akira ransomware is a type of ransomware that targets both Windows and Linux devices.
- It encrypts data on the affected devices, appends filenames with the “.akira” extension, and deletes Windows Shadow Volume copies to prevent data recovery.
- The ransomware also terminates Windows services to ensure uninterrupted encryption. After stealing and encrypting sensitive data, the attackers demand a ransom, threatening to release the data on the dark web if their demands are not met.

#### How it works?

- The ransomware is spread through spear phishing emails with malicious attachments, drive-by downloads, specially crafted web links in emails, and insecure Remote Desktop connections.
- It has targeted various domains, including education, finance, real estate, manufacturing, and consulting, and once inside a corporate network, it spreads laterally to other devices using stolen Windows domain admin credentials.

#### To protect against Akira ransomware and other similar threats, users are advised to:

- Maintain up-to-date offline backups
- Keep operating systems and networks updated
- Implement strong password policies and multi-factor authentication
- Enforce data encryption
- Block attachment file types that are commonly associated with malicious code
- Regular security audits of critical systems

### 6.2 India and the Nuclear Weapon

The article discusses the timeline of India’s nuclear journey as well as its advantages.

#### Timeline of India’s Nuclear Journey:

Year	Event
1947	India gains independence.
1948	Atomic Energy Act was passed, establishing AEC.
1950	Nehru’s dual intent strategy on nuclear power.
1964	China conducts its first nuclear test.
1974	India conducts its <b>first nuclear test (Smiling Buddha)</b> .
1985	US President R Reagan tells Rajiv Gandhi about Pakistan’s bomb.
1989	Rajiv Gandhi approves the development of nuclear weapons.
1998	India conducts nuclear tests ( <b>Operation Shakti</b> ).
1999	Kargil conflict between India and Pakistan.
2005	Indo-US nuclear deal negotiations begin.
2008	Indo-US nuclear deal ratified by <b>Nuclear Suppliers Group</b> .
Present	India maintains a <b>policy of credible minimum deterrence</b> and global nuclear disarmament.

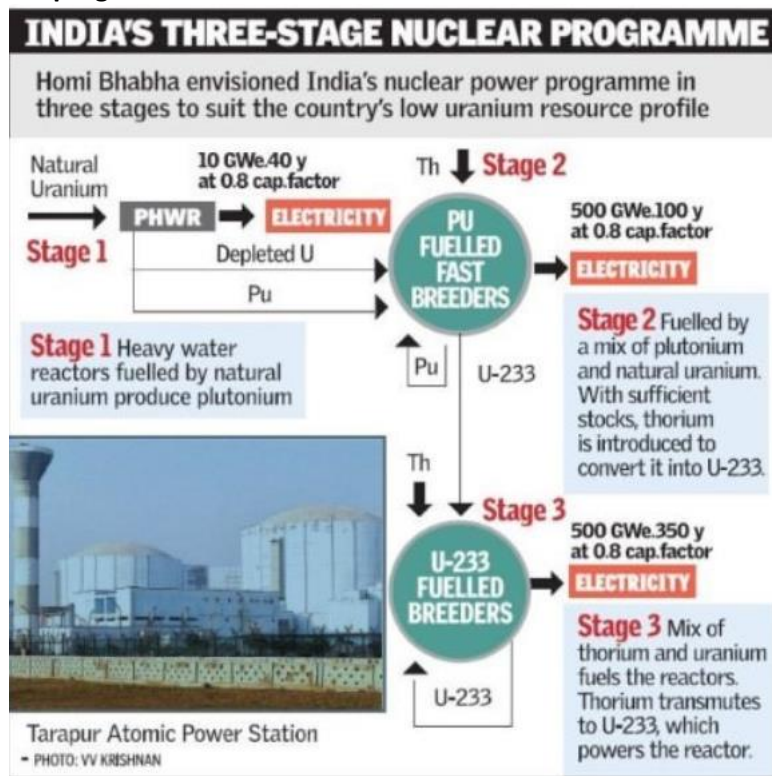
#### India’s nuclear doctrine (presented in 1999) since Pokhran-II:

- It highlighted a credible minimum deterrence (CMD) and a no-first-use (NFU) policy, while concurrently supporting non-proliferation and universal disarmament.
- The sole purpose of India’s nuclear deterrence is to deter adversaries’ use or threat of use of nuclear weapons.



- The policy changed India's image and the US (once an adversary of India's nuclear programme) signed a civil nuclear deal with India in 2008, acknowledging India as a responsible nuclear player.

### India's three stages nuclear program



- Performance of India's three-stage nuclear power plan: India's three-stage nuclear power programme was formulated by Homi Bhabha in the 1950s to secure the country's long-term energy independence, through the use of uranium and thorium reserves found in the monazite sands of coastal regions of South India.
- Three-stage nuclear Plan: The first two stages, natural uranium-fueled heavy water reactors and plutonium-fueled fast breeder reactors, are intended to generate sufficient fissile material from India's limited uranium resources so that all its vast thorium reserves can be fully utilized in the third stage of thermal breeder reactors.

### Performance:

- First-stage PHWRs, cover around half the entire existing base of Indian nuclear power (4780 MW).
- As of now, India produces about 6.7 GW of power from nuclear fuel from its 22 nuclear power plants, effectively contributing 1.8 per cent to the total energy mix.
- While India has successfully completed the first stage of its nuclear fuel program, the second stage is still in the works and has taken much longer than expected.
- The first 500 MW Pressurized Fast Breeder Reactor (PFBR) BHAVINI, being set up in Kalpakkam, Tamil Nadu, is still in the process of being commissioned and has suffered from significant time and cost overruns.
- According to a report by the government large-scale thorium deployment is only to be expected 3 – 4 decades after the commercial operation of fast breeder reactors. [2040-2070]
- As there is a long delay before direct thorium utilisation in the three-stage programme, the country is now looking at reactor designs that allow more direct use of thorium in parallel with the sequential three-stage programme.

### Nuclear power has empowered India:

Aspect	Empowerment through Nuclear Power
Strategic Autonomy	Enables independent decision-making in national security matters.
Deterrence Capability	Provides a credible deterrence against potential adversaries.
Global Recognition	Elevates India's status as a responsible nuclear power on the global stage.
Negotiating Power	Enhances India's leverage in international diplomatic negotiations.
Technology Advancement	Drives advancements in nuclear technology, research, and development.
Energy Generation	Contributes to clean energy generation and reduces dependence on fossil fuels.
International Cooperation	Facilitates collaboration with other nations in nuclear research and trade.
Space Exploration	Supports advancements in space technology through nuclear propulsion.
Scientific Excellence	Boosts India's scientific capabilities and human resources development

### 6.3 Israeli Spike Non-Line of Sight (NLOS) anti-tank guided missiles

The Indian Air Force (IAF) has acquired Israeli Spike Non-Line of Sight (NLOS) anti-tank guided missiles, capable of hitting targets up to 30 km away.

It is developed and designed by Israeli company Rafael Advanced Defense Systems

#### Features:

- Lightweight, fire-and-forget tactical precision-guided missiles using electro-optical and fibre-optic technologies.
- The missiles will be integrated with Russian-origin Mi-17V5 helicopters, enhancing the IAF's ability to engage hidden targets behind mountains or hills.

#### Significance:

- The delivery of these missiles follows the IAF's interest in them due to concerns over border tensions, particularly near the Line of Actual Control (LAC) with China.
- The IAF aims to bolster its arsenal through indigenous production and foreign acquisitions to address security threats, as demonstrated by this acquisition of long-range anti-tank missiles.

## 7. Social issues

### 7.1 Impact of Climate Change on Children

- A recent study has highlighted how climate change contributes to violence against children.
- Addressing violence against children due to climate change requires a multi-faceted approach:
- **Integrated Policies:** Develop context-specific policies that recognize the link between climate change and violence against children.
- **Early Warning Systems:** Establish early warning systems for climate-related disasters that specifically consider children’s vulnerabilities.
- **Psychosocial Support:** Offer counselling, play therapy, and mental health services to help children cope with anxiety and stress.
- **Gender-Sensitive Interventions:** Focus on preventing child marriage, human trafficking, and gender-based violence exacerbated by climate change.
- **Climate-Resilient Education:** Integrate climate change awareness and preparedness into school curricula to empower children with knowledge and skills to face climate-related challenges.
- **Child-Centred Disaster Plans:** Develop and implement disaster preparedness plans that specifically address the needs and vulnerabilities of children during extreme weather events.
- **Child-Centred Shelters:** Design and set up shelters that prioritize the safety and well-being of children during emergencies.

### 7.2 WHO Report on the Global Tobacco Epidemic, 2023

The new WHO report on tobacco control highlights global progress, including the implementation of MPOWER measures.

#### What is the MPOWER measure?

MPOWER measures are tobacco control strategies developed by the World Health Organization (WHO) in 2008.

They include:

- M=Monitor tobacco use
- P=Protect people from tobacco smoke
- O=Offer help to quit tobacco
- W=Warn about tobacco dangers
- E=Enforce bans on tobacco advertising
- R=Raise taxes on tobacco products

#### Key highlights of the Report:

Highlights	Description
<b>Global Smoking Decline</b>	Worldwide, with <b>300 million fewer smokers today</b> , the prevalence of smoking declined from <b>22.8%</b> (2007) to 17% (2021)
<b>Implementation Progress</b>	<b>Over 5 billion</b> people (71% of the global population) are protected by at least one MPOWER measure
<b>Countries Implementing MPOWER</b>	The number of countries implementing at least one MPOWER measure increased from <b>44 (2008) to 151 (2022)</b> . Only <b>4 countries</b> (Brazil, Turkey, Netherlands, and Mauritius) have implemented all measures.

<b>E-cigarettes Warning</b>	WHO warns <b>against the aggressive promotion of e-cigarettes</b> as a safer alternative, especially for youth
<b>Second-hand Smoke Impact</b>	<b>Second-hand smoke exposure</b> is linked to <b>over 1 million non-smoker</b> deaths annually, various health issues
<b>India's Achievements</b>	India excels in <b>health warning labels and tobacco dependence</b> treatment; bans sale of e-cigarettes
	<b>27% reduction in smoking in public places</b> in Bengaluru due to enforcement and communication efforts
<b>Recommendations</b>	<b>Need for warnings on OTT platforms</b> , stronger enforcement, bans on loose cigarette sales, and increased fines; <b>Bans on tobacco advertising</b> can minimize its consumption
	Efforts to reduce <b>second-hand smoking through smoke-free public areas</b> and awareness campaigns



### 7.3 Mental health issues in Security forces

An RPF jawan (on the Jaipur-Mumbai Superfast Express) with mental health issues shot and killed passengers, prompting questions about having armed troubled personnel on duty

#### What is mental health?

- According to the World Health Organization (WHO), mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.

#### Status of issue:

- The suicide rate in the Indian Army is about 8.5 suicides per 100000 people

<b>Reasons for Prevalence of Mental Health Issues in Uniformed Forces</b>	
<b>Tightly Structured Hierarchy</b>	Command-and-control hierarchy system
	Senior officer as reporting authority
	Lack of platform for communicating personal issues
<b>Stress is not Addressed</b>	Signs of stress are often ignored
	Fear of being perceived as weak
	Pressure to conform to “macho” stereotype
<b>Less Recognition for Achievements</b>	Lack of recognition for constabulary
	Frequent persecution for failures
<b>Tendency towards Alcoholism</b>	Resorting to alcohol/drug abuse for coping
<b>Lack of Awareness and Stigma</b>	Lack of awareness about mental health issues
	The stigma around seeking help for mental health concerns
<b>Separation from Family and Home</b>	Being away from family for extended periods
	Isolation and loneliness due to duty demands
<b>Job-related Stress and Trauma</b>	Exposure to traumatic events
	High-stress nature of duties
<b>Poor Working Conditions</b>	Meagre salary and inadequate facilities
	Lack of timely leaves and allowances

**Some key measures to address mental health issues among uniformed forces:**

- **Awareness and Training:** Conduct regular awareness campaigns and training programs to educate personnel and superiors about mental health, its signs, and the importance of seeking help.
- **De-Stigmatization:** Work towards creating a culture where seeking mental health support is encouraged and not stigmatized, challenging stereotypes of strength and vulnerability.
- **Access to Counseling:** Establish confidential counselling services accessible to all personnel, providing a safe space for them to discuss their concerns and receive professional guidance.
- **Leadership Involvement:** Involve senior officers in mental health initiatives, encouraging open communication, understanding, and proactive support for struggling personnel.
- **Early Intervention:** Develop a system for early identification of mental health issues through regular assessments, screenings, and peer support mechanisms.
- **Promote Work-Life Balance:** Implement policies that ensure adequate leaves, balanced work hours, and opportunities for personnel to connect with their families and loved ones.
- **Wellness Programs:** Offer wellness programs that focus on stress reduction, resilience-building, mindfulness, and coping strategies to enhance mental well-being.
- **Crisis Response:** Develop protocols for responding to crisis situations, including access to immediate

psychological support for personnel involved in traumatic incidents.

- Peer Support Networks: Establish peer support networks where personnel can openly share their experiences, provide mutual assistance, and foster a sense of camaraderie.
- Family Support: Recognize the role of families in supporting personnel’s mental health; provide resources and counselling to families to help them understand and address these issues.
- Inclusive Policies: Tailor policies and interventions to the diverse needs of personnel, considering factors like gender, age, cultural backgrounds, and ranks.

**The government has taken several steps to improve mental health:**

- Constitutional Provision: Recognized healthcare as a fundamental right under Article 21.
- Mental HealthCare Act 2017: Ensured access to mental healthcare from government-funded services, reduced use of Section 309 IPC (suicide attempt), and focused on treatment.
- National Mental Health Program (NMHP): Addressed mental disorders and the shortage of professionals since 1982, including modernization of mental hospitals and upgrading psychiatric wings.
- Kiran Helpline: Launched a 24/7 toll-free helpline to provide support for anxiety, depression, suicidal thoughts, and more.
- Manodarpan: Launched under Atmanirbhar Bharat Abhiyan to offer psychosocial support for students, families, and teachers during the Covid-19 pandemic.

**Conclusion:**

- Addressing mental health issues in uniformed forces is crucial for both the well-being of personnel and the effectiveness of their roles. In this context, Regular sampark sabhas need to be conducted where personnel can air their grievances and proper follow-up action must be taken on all possible issues.

**7.4 SC guidelines for eliminating gender stereotypes**

- The Supreme Court has released a 30-page handbook aimed at eliminating gender stereotypes from legal language and proceedings.
- The “Handbook on Combating Gender Stereotypes” addresses unjust gender-based terms frequently used in Indian courts and offers accurate alternatives. It emphasizes the importance of using language that respects the rights and dignity of all individuals.

Stereotype promoting language (INCORRECT)	Alternative language (PREFERRED)
Adulteress	Woman who has engaged in sexual relations outside of marriage
Affair	Relationship outside of marriage
Bastard	Non-marital child or, a child whose parents were not married
Biological sex / biological male / biological female	Sex assigned at birth
Born a girl / boy	Assigned female / male at birth
Career woman	Woman
Carnal intercourse	Sexual intercourse
Chaste woman	Woman
Child prostitute	Child who has been trafficked
Concubine / keep	Woman with whom a man has had romantic or sexual relations outside of marriage

**Significance of the “Handbook on Combating Gender Stereotypes:**

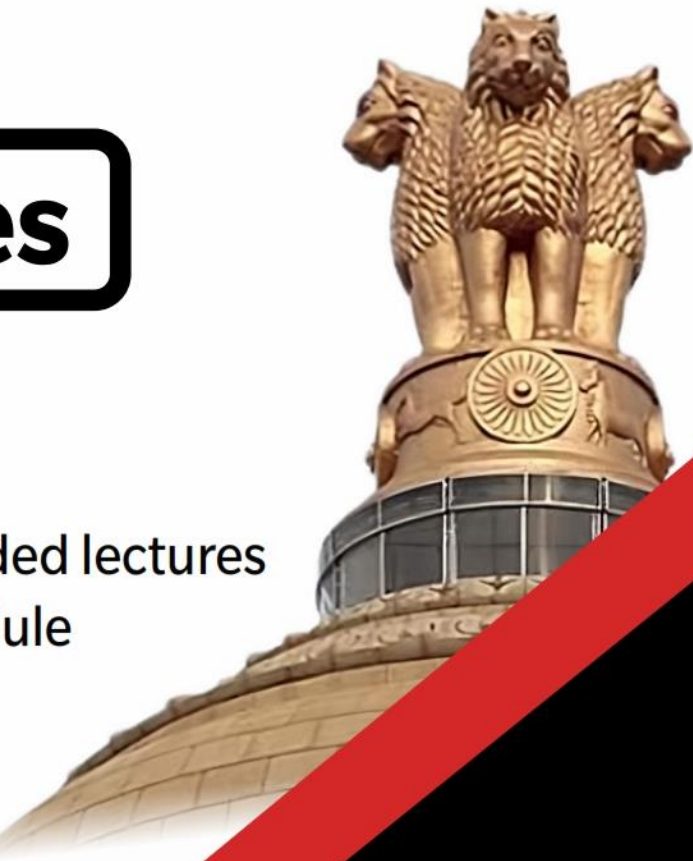
Significance	Explanation
<b>Eliminating Gender Stereotypes</b>	The handbook aims to <b>remove gender-based terms</b> and assumptions from legal language, promoting fairness and impartiality.
<b>Promoting Equal</b>	By encouraging the use of <b>accurate terms</b> , the handbook helps ensure <b>equal</b>

<b>Justice</b>	<b>treatment and justice for all individuals.</b>
<b>Challenging Biased Assumptions</b>	The handbook challenges <b>stereotypes about women’s emotional capacity and rational thinking</b> , emphasizing that <b>gender does not dictate one’s ability for rational thinking</b>
<b>Fostering Respect and Dignity</b>	Using respectful language <b>respects the dignity and rights of all individuals</b> involved in legal proceedings.
<b>Enhancing Legal Communication</b>	The handbook underscores the <b>importance of language in legal proceedings</b> , promoting <b>clear and accurate communication</b> .
<b>Aligning with Constitutional Values</b>	Removing gender stereotypes aligns legal practices with the <b>constitutional principles of equality and human rights</b>
<b>Empowering and Inspiring Legal Professionals</b>	The handbook empowers legal professionals to use language that upholds <b>justice, equality, and dignity</b> in legal proceedings.



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