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Mains Daily Analysis

General Studies I

1. 30 districts to be recognised for containing drug abuse among school children

Why in news?
The National Commission for Protection of Child Rights (NCPCR) will honor **30 top-performing districts for successfully implementing a Joint Action Plan to curb substance abuse among school children**. The awards will be presented on June 30 by Minister of State for Home Nityanand Rai. The event coincides with a national review and consultation organized by NCPCR and the Narcotics Control Bureau (NCB) on preventing drug and substance abuse and illicit trafficking.

National Commission for Protection of Child Rights (NCPCR)
- **About**
  - The NCPCR is a **statutory body established in 2007** under the **Commission for Protection of Child Rights Act, 2005**.
  - Its primary objective is to **ensure the protection of child rights as enshrined in the Indian Constitution and various international conventions.**
  - The NCPCR's mandate is to monitor and promote the rights of children, defined as individuals below the age of 18 years, and ensure their well-being in all aspects of their lives.
  - The Commission **envisages a rights-based perspective**, which flows into national policies and programmes.

- **Some of the notable Works of NCPCR**
  - **Elimination of Corporal Punishment**
    - NCPCR has actively worked to **eliminate corporal punishment in schools** by issuing guidelines and creating awareness about the negative impacts of such practices on children's mental and physical health.
  - **Protection of Children from Sexual Offences (POCSO) Act**
    - The **commission plays a crucial role in the effective implementation of the POCSO Act**, which provides stringent measures to address sexual abuse and exploitation of children.
  - **Child Labour**
    - NCPCR has been instrumental in addressing child labor issues by monitoring and advocating for the strict enforcement of laws that prohibit child labor and ensure the rehabilitation of affected children.
  - E**ducation**
    - The commission monitors the implementation of the Right to Education (RTE) Act, ensuring that children receive free and compulsory education.
    - It also addresses issues related to school infrastructure, teacher quality, and child-friendly learning environments.
  - **Juvenile Justice**

- NCPCR oversees the implementation of the Juvenile Justice (Care and Protection of Children) Act, ensuring that children in conflict with the law receive proper care and rehabilitation.
  - o **Combating Substance Abuse**
    - NCPCR has launched initiatives and action plans to prevent and address substance abuse among children.
  - o **Child Trafficking**
    - The commission works to prevent child trafficking by collaborating with various stakeholders, conducting rescue operations, and ensuring the rehabilitation and reintegration of trafficked children.
  - o **COVID-19 Response**
    - During the COVID-19 pandemic, NCPCR launched various initiatives to support children affected by the crisis, including those who lost parents or guardians.
    - It wor**ked on ensuring continuity in education, providing mental health support, and safeguarding children's rights during lockdowns and school closures.**

Narcotics Control Bureau (NCB)
- **About:** NCB is the apex drug law enforcement and intelligence agency of India, established in 1986 under the **Narcotic Drugs and Psychotropic Substances Act (NDPS Act), 1985**.
  - o The NCB is responsible for combating drug trafficking and the abuse of illegal substances.
- **Nodal ministry:** The NCB operates under the Ministry of Home Affairs, Government of India.

Fight against drug menace – India's regulatory framework
- **Article 47 of the Indian Constitution**
  - o The **National Policy on Narcotic Drugs and Psychotropic Substances is based on the Directive Principles, contained in Article 47 of the Indian Constitution.**
  - o The Article directs the State to endeavour to bring about prohibition of the consumption, except for medicinal purposes, of intoxicating drugs injurious to health.
- **Signatory to international conventions**
  - o India is a signatory to:
    - the single Convention on Narcotic Drugs 1961, as amended by the 1972 Protocol, the Conventions on Psychotropic Substances, 1971 and
    - the **United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988.**
- **Existing Laws**
  - o **The broad legislative policy is contained in the three Central Acts:**
    - Drugs and Cosmetics Act, 1940,
    - The Narcotic Drugs and Psychotropic Substances Act, 1985, and
    - The Prevention of Illicit Traffic in Narcotic Drugs and Psychotropic Substances Act, 1988.

30 districts to be recognised for containing drug abuse among school children
- **About Joint Action Plan (JAP)**
  - o JAP was **developed by the NCPCR and the NCB** based on deliberations with the concerned Ministries in 2021.
  - o It streamlines efforts made by different agencies to bring paradigm shifts in prevention.
  - o **The JAP is a framework to:**
    - wean children away from drug abuse;

- stop the sale of drugs in areas surrounding educational and children care institutions; and
    - prevent the reach of pharmaceutical drugs and other goods used as intoxicants by children.
- **'Prahari' (sentry) portal to be launched**
    - During the vent, **a new portal called 'Prahari' (sentry) to be launched**.
    - The **portal aims to conduct quarterly awareness activities on drugs and substance abuse in schools**. These activities will be organized by children and teachers nominated by special 'Prahari' clubs.
    - These clubs are managed and run by children to achieve shared goals.

2. Srinagar gets tag of World Craft City

Why in news?
Srinagar has become the fourth Indian city to be recognized as a 'World Craft City' by the World Craft Council (WCC), following its designation as part of the UNESCO Creative City Network (UCCN) for crafts and folk arts three years ago.
Jaipur, Malappuram and Mysore are the other Indian cities that have previously been recognised as World Craft Cities.

World Craft Council (WCC)
- **About**
    - WCC is a non-profit, non-governmental organization affiliated with UNESCO.
    - Established in **1964**, it aims to promote the **preservation, protection, and development of traditional crafts and foster economic development through crafts.**
- **World Craft City Recognition by WCC**
    - World Craft City recognition by the WCC is an esteemed designation given to cities that excel in the promotion and development of traditional crafts and artisanship.
    - This recognition acknowledges the city's commitment to preserving and promoting its unique craft heritage and supporting local artisans.
- **Significance of World Craft City Recognition**
    - **International Prestige**: The recognition elevates the city's status on a global platform, enhancing its reputation as a center of excellence for crafts.
    - **Economic Benefits**: This designation can boost the local economy by attracting tourists, investors, and buyers interested in authentic crafts, thereby increasing market opportunities for artisans.
    - **Cultural Preservation**: It highlights the city's dedication to preserving traditional crafts, ensuring that these cultural practices are passed down to future generations.
    - **Support for Artisans**: The recognition often leads to increased support for local artisans, including funding, training, and opportunities for international collaboration and exchange.
    - **Promotion of Innovation**: It **encourages innovation within the craft sector by blending traditional techniques with modern designs, fostering creativity and sustainability**.
    - **Enhanced Visibility**: The city and its crafts receive greater visibility through international media coverage, exhibitions, and events associated with the WCC.
- **Criteria for Recognition as a World Craft City, a city typically needs to demonstrate:**
    - A rich tradition of crafts and a significant population of skilled artisans.
    - **Active promotion and development of craft traditions.**
    - Commitment to preserving cultural heritage & supporting sustainable practices.
    - Evidence **of innovation and creativity in craft practices**.

o   Strong community involvement and support for the craft sector.

UNESCO's Creative Cities Network (UCCN)
- **About**
  o   The **UCCN was created in 2004 to promote cooperation among cities that have identified creativity as a strategic factor for sustainable urban development.**
  o   It now **includes 350 cities in over a hundred countries.**
  o   It was launched to promote UNESCO's goals of cultural diversity and strengthen resilience to threats such as **climate change, rising inequality, and rapid urbanisation.**
- **Aim**
  o   The network is **aimed at leveraging the creative, social, and economic potential of cultural industries**.
  o   It encourages a culture of creativity in urban planning and solutions to urban problems.
- **Objective of the CCCN**
  o   It allows member cities to recognise creativity as an essential component of urban development, notably through partnerships involving the public and private sectors and civil society.
  o   It **envisages to develop hubs of creativity and innovation and broaden opportunities for creators and professionals in the cultural sector.**
  o   These cities have to achieve the UN agenda of sustainable development.
- **Areas of action**
  o   The objectives of the network are implemented both at the level of the member cities and at the international level, notably through sharing experiences, knowledge and best practices.
  o   There are professional and artistic exchange programmes, research and evaluations on the experience of the creative cities, among other activities.
- **The annual conference of network cities**
  o   A highlight of the network is the **annual conference of mayors and other stakeholders of network cities.**
  o   This offers a unique occasion to strengthen ties between creative cities from across the world.
  o   **The last conference was held in Santos, Brazil, and this year's conference was in Istanbul**. The next conference will be held in July 2024 in Braga, Portugal.
- **Responsibilities of members**
  o   Every four years, member cities are required to submit a Membership Monitoring Report.
  o   This **report is presented with an aim of demonstrating their steadfast commitment towards the implementation of the UCCN Mission Statement.**
  o   They present an action plan for the following four years, providing insights into their achievements and lessons learnt, as well as the impact of the designation.
- **Indian cities in the network**
  o   Apartfrom **Kozhikode** and **Gwalior**, **Varanasi** (music), **Srinagar** (crafts and folk arts) and **Chennai** (music) are part of the network.

3. Cost of Inequality: What India's 129 Rank in Global Gender Gap Index Means

Context
- The **2024 edition of the Global Gender Gap Index reveals a concerning picture for India,** placing the country at 129th out of 146 surveyed countries.

- This **position, near the bottom of the rankings, reflects a persistent gender disparity** that has seen little improvement over recent years.
- Comparatively, **in 2021, India was ranked 140th out of 156 countries,** indicating that the country has remained entrenched in the bottom 20 percentile of this index.

Understanding the Global Gender Gap Index
- **The Global Gender Gap Index**, introduced in 2006 (by World Economic Forum), **serves as a comprehensive measure of gender equality** across various dimensions.
- It **comprises four sub-indices: economic participation and opportunity, educational attainment, health and survival, and political empowerment.**
- Each sub-index aggregates multiple indicators to provide a summarised score and **the overall index ranges from 0 to 1, where 1 signifies complete gender parity.**
- It is **crucial to note that this index focuses on the relative position of women to men rather than their absolute status,** thereby highlighting gender gaps.
- **While the index does not encompass every aspect of gender equality, it offers valuable insights** into key areas that can be reliably measured and tracked over time.
- It **functions as a highlighter of significant statistics** rather than a comprehensive analysis.
- The **Centre for Economic Data and Analysis (CEDA) has developed an interactive tracker to monitor India's position over time** and relative to other countries across these sub-indices, further enhancing our understanding of gender parity dynamics.

India's Performance in Sub-indices
- **Health and Survival**
  - **In the Health and Survival sub-index, India's score is 0.951**, indicating that **95.1% of the gender gap in this area has been closed.**
  - Despite this high score, India ranks 142nd out of 146 countries.
  - This **paradox suggests that while India has made significant progress, other countries have advanced further,** pushing India lower in the relative rankings.
- **Educational Attainment**
  - Similarly, **in the Educational Attainment sub-index, India has closed 96.4%** of the gender gap. However, the country stands at 112th position globally.
  - This **indicates that despite substantial achievements in education for women, other nations have outperformed India**, highlighting a relative lag in progress.
- **Economic Participation and Opportunity**
  - The Economic Participation and Opportunity sub-index reveals a more troubling scenario.
  - **India's score here is 39.8%,** placing it at 142nd among 146 countries.
  - Although **this represents an improvement from 32.6% in 2021, it is still significantly lower than the 2012 score of 46%.**
  - This **sub-index is based on labour force participation**, share in managerial positions, wage gaps, and wage parity.
  - **India's low score underscores the persistent economic barriers women face,** including lower labour force participation and significant wage disparities.
  - **In comparison, countries with the lowest economic parity levels,** such as Bangladesh (31.1%), Sudan (33.7%), Iran (34.3%), Pakistan (36%), and Morocco (40.6%), **share similar challenges.**

- These nations exhibit less than 30% gender parity in estimated earned income and less than 50% in labour force participation.
- **Political Empowerment**
  - On the Political Empowerment sub-index, **India has closed only 25.1% of the gender gap, ranking 65th globally.**
  - This is **a significant drop from the 51st position in 2021, with a score of 27.6%.** The decline is even more pronounced when compared to the 43.3% score around 2014.
  - This **indicates a regression in political participation** for women over the past decade.
  - **Despite the global advances in gender equality in economic, educational, and health spheres, progress in political participation remains sluggish**, both globally and within India.

Regional Comparison and Broader Economic Implications
- **Regional Comparison**
  - **India's position is also concerning within the regional context of South Asia**, which ranks seventh out of eight global regions, only ahead of the Middle East and North Africa (MENA).
  - **Among the seven South Asian countries, India ranks fifth**, with Bangladesh leading at the 99th position globally.
  - This **regional comparison underscores India's struggle with gender parity**, as it lags several of its immediate neighbours.
  - The **persistence of gender gaps in key indicators, despite some improvements, signals a broader issue.**
  - **A decade ago, India's gender gaps were narrower**, indicating that progress has stalled or reversed in several areas.
  - This **raises a critical question whether India should acknowledge these findings and take corrective action,** or dismiss the metrics and blame the messengers.
- **Economic Implications of Gender Inequality**
  - There is substantial research highlighting the economic costs of sidelining women.
  - The **Organisation for Economic Co-operation and Development (OECD) estimates** that **gender-based discrimination** in social institutions could **cost the global economy up to $12 trillion.**
  - Reducing gender discrimination can significantly boost GDP growth rates.
  - This **understanding necessitates the mainstreaming of gender equality into economic policy-making,** rather than treating it as a secondary issue to be addressed later.

Social Implications and Long-term Benefits of Gender Equality
- **Achieving gender equality is not only an economic imperative but also a social one** and empowering women leads to better outcomes in health, education, and social stability.
- For instance, **women who are economically empowered are more likely to invest in their children's education and health**, creating a positive intergenerational impact.
- Furthermore, **when women are included in decision-making processes, both in corporate and political spheres, policies tend to be more inclusive** and address a broader range of social issues.
- This **inclusiveness leads to more equitable societies** where everyone can thrive.

Key Strategies to Address the Gender Inequality
- **Educational Investments**
  - Ensuring equal access to education for girls and women is fundamental.

- o **Education empowers women with the skills and knowledge needed to participate fully in the economy.**
  - o Policies that promote STEM education for girls can help bridge gender gaps in high-paying and in-demand fields.
- **Supportive Work Environments:** Implementing policies that support work-life balance, such as **maternity and paternity leave, affordable childcare, and flexible working hours, can encourage more women** to enter and remain in the workforce.
- **Equal Pay Legislation**
  - o Enforcing laws that mandate equal pay for equal work can help reduce wage disparities.
  - o **Transparent pay structures and regular pay audits can ensure compliance** and highlight areas needing improvement.
- **Entrepreneurship Support**
  - o **Providing access to capital, training, and mentorship** for women entrepreneurs **can stimulate economic growth.**
  - o Women-owned businesses contribute significantly to job creation and economic diversification.

Conclusion
- **India's position in the 2024 Global Gender Gap Index highlights significant challenges** and areas requiring urgent attention.
- Despite progress in health and education, **economic participation and political empowerment remain areas of concern.**
- Recognising the economic benefits of gender equality, **it is imperative that India integrates gender considerations into its core economic strategies and creates a societal environment that treats women as equal stakeholders in all aspects of life.**

4. Why Caste Should Inform Debates on Inequality in the Country

Context
- **A recent working paper from the World Inequality Lab** has rekindled discussions on the persistent and **widening gap between the rich and poor globally.**
- **Utilising metrics such as the Gini coefficient and percentile ratios**, an examination of consumption inequality for the years 2017-18 and 2022-23 **reveals critical insights into the socioeconomic landscape of India.**
- Therefore, **it is important to study and focus on the disparities among different social groups, namely the Scheduled Tribes (ST), Scheduled Castes (SC), Other Backward Classes (OBC),** and the General category.

An Analysis of Consumption Patterns, Caste Disparities and Changes in Gini Coefficient
- **Consumption Patterns, Caste Disparities**
  - o In **2022-23, the STs,** accounting for 9% of the population, **had a consumption share of only 7%. SCs, comprising 20% of the population, held a 16% consumption share.**
  - o **OBCs, representing 43% of the population, had a consumption share of 41%**, indicating a more conservative consumption pattern within this group.
  - o Conversely, **the General category, despite constituting 28% of the population, commanded a consumption share of 36%.**

- These **figures highlight persistent disparities in consumption distribution across various social groups,** with SCs and STs consistently lagging the General and OBC categories.

- **Changes in the Gini Coefficient**
  - The **overall Gini coefficient, a measure of income inequality, decreased from 0.359 in 2017-18 to 0.309 in 2022-23, signifying a reduction in income inequality** by 0.050.
  - Among the STs, the Gini coefficient fell from 0.322 to 0.268, a 0.054-point drop, indicating improved equitable consumption distribution within this community.
  - The **SC category saw a decrease from 0.312 to 0.273, while the OBC category's Gini coefficient declined from 0.336 to 0.288,** a 0.048-point decrease.
  - The **General category experienced the most significant reduction, from 0.379 to 0.306,** amounting to a 0.073-point drop.
  - This **substantial decrease may reflect various socioeconomic changes**, including social mobility and effective policy interventions.

Persistent Economic Disparities
- **Consumption Inequality Among Different Deciles**
  - An examination of the consumption levels among the **bottom 20% decile of various social groups from 2017-18 to 2022-23 reveals marginal decreases for the ST, SC, and OBC**
  - This **slight decline indicates that these communities have not experienced significant improvements** in their economic conditions despite broader economic growth.
  - **For the ST and SC communities, this trend is particularly concerning** as it underscores their continued vulnerability and marginalization within the Indian economy.
  - In stark contrast, **the General category witnessed a more pronounced decline** in consumption levels among its poorest segment.
  - This indicates that while there might be a general reduction in inequality, **the poorest individuals within the General category are experiencing relative economic declines.**
  - This **could be due to several factors, including the lack of targeted welfare schemes that effectively reach the most disadvantaged in this group**, or broader economic policies that disproportionately benefit the already affluent.

- **Disproportionate Wealth Accumulation**
  - Conversely, **consumption patterns among the top 20% decile of all social groups show slight increases,** with the General category experiencing a significant 10-percentage-point surge.
  - This **substantial rise among the wealthiest segment of the General category suggests a concentration of wealth** and resources among high-caste elites.
  - **Such a trend implies that economic gains in the country are not evenly distributed** but are instead disproportionately accruing to those already at the top of the socioeconomic hierarchy.
  - The **substantial increase in consumption among the top decile of the General category highlights the potential for wealth accumulation** and the perpetuation of economic advantages within this group.
  - This **phenomenon can be attributed to several factors, including access to better educational and employment opportunities,** social networks that facilitate economic advancement, and policies that, while ostensibly universal, effectively favour those with existing advantages.

- **Caste-Based Economic Exclusion**
  - The **economic exclusion of the ST and SC communities is further evidenced by their lower consumption** shares relative to their population proportions.
  - **Despite constituting 9% of the population, the STs account for only 7% of total consumption**.

- o Similarly, **the SCs, making up 20% of the population, have a consumption share of just 16%**.
- o This discrepancy is indicative of systemic barriers that limit the economic opportunities available to these groups.
- o **Factors such as limited access to quality education, employment discrimination, and geographical marginalisation** (many ST communities reside in remote, less developed areas) contribute to these ongoing disparities.
- **Intergenerational Transmission of Inequality**
  - o The **persistence of these disparities also highlights the intergenerational transmission** of inequality.
  - o **Economic disadvantages faced by one generation in the ST and SC communities are often passed down to the next**, creating a cycle of poverty and marginalization.
  - o This **cycle is reinforced by limited social mobility and the lack of effective affirmative action** in practice, despite constitutional guarantees.

Impact of Policy Interventions to Mitigate Economic Disparity and Implications of Persisting Disparity
- **Impact of Policy Interventions**
  - o While various policy interventions have aimed to address these disparities, **their impact has been uneven.**
  - o **For instance, reservation policies in education and employment have provided some upward mobility** for members of the SC and ST communities.
  - o However, **these policies have not sufficiently addressed the broader economic inequities that affect daily consumption** and living standards.
  - o Additionally, **rural development initiatives and direct benefit transfers, while beneficial, have not fully reached the most disadvantaged** due to implementation challenges and inefficiencies.
- **Implications of Economic Disparities on Social Stability**
  - o The **underlying economic disparities among India's social groups have broader implications for social stability and cohesion.**
  - o **Persistent inequality can lead to social unrest**, as marginalised communities become increasingly aware of the gaps in wealth and opportunity.
  - o This **can undermine the broader goals of economic development** and social harmony.
  - o Therefore, addressing these disparities is not only a matter of economic policy but also one of social justice and national stability.

Strategies for Addressing Economic Disparities
- To effectively address these disparities, **it is essential to implement comprehensive and targeted strategies.**
- This **includes enhancing access to quality education and healthcare for marginalised communities, creating economic opportunities** through skill development and employment programs, and ensuring that welfare schemes are effectively reaching those in need.
- Additionally, **there should be a focus on creating an inclusive economic environment that enables social mobility** and reduces systemic barriers to economic participation for all social groups.

Conclusion
- **While India has made significant strides in reducing overall income inequality** and lifting millions out of poverty, **the persistent caste-based disparities** in consumption and economic status **underscore the need for continued and focused policy interventions.**

- **By addressing the unique challenges** faced by different social groups, particularly the ST and SC communities, **India can move closer to achieving a more equitable and harmonious society.**
- **The reduction in the Gini coefficient and improvements in consumption patterns are promising, but sustained efforts are necessary** to ensure that these gains are broadly shared across all segments of society.

5. Satnamis and their History of Protests

Why in News?

A huge mob from the Satnami community torched dozens of vehicles, pelted police personnel with stones and set afire the Superintendent of Police office building in Chhattisgarh's Baloda Bazar district. The protesters were not satisfied with the police's handling of a case (and demanding a CBI probe) involving the desecration of a 'Jaitkhamb', a structure of sacred importance to the Satnamis.

Who is the Satnamis Community?
- Satnamis (believes in God whose name is 'truth') are a predominant group within the 11% **Scheduled Caste** (SC)population in **Chhattisgarh** and who are believed to be an offshoot of the **Ravidassia community.**
- The community was founded on **April 21, 1657 by Bir Bhan** of Narnaul, Haryana. **Udhodas**, a disciple of Saint Ravidas, was the first priest or spiritual guru of the society.
- **The community inhabits the plains** of the state's central region, mostly the old districts of Bilaspur, Durg, Rajnandgaon and Raipur.
- **The sect emphasises on three principles** - adorn the attire of a Satnami devotee, earn money through proper means and **do not tolerate any injustice or oppression in any form**.
- There is a belief that the Satnamis **exert political influence by voting collectively**.
  o The majority of the 10 assembly segments allotted for SCs are occupied by community representatives.
- The community reveres **Mini Mata** - the first female Member of Parliament from Chhattisgarh, who entered the Lok Sabha by winning the 1955 by-election.
  o Invoking her, political parties appeal to Satnamis for votes.

History of Protest of Satnamis Community - Revolt of 1672:
- The Satnami revolt occurred in the reign of the **Mughal Emperor Aurangzeb** and around what is today's Mahendragarh district of **Haryana**.
- **The revolt began when a Mughal soldier killed a Satnami** and the result was that about 5,000 Satnamis were up in arms.
- They routed the Mughal troops situated in the town, drove away the Mughal administrators and **set up their own administration in its place**.
- The uprising **gained the enthusiasm of Hindus** in Agra and Ajmer also, as they were not happy with Aurungzeb's strict Islamic policies, which included
  o **Reviving the Jizya tax (poll tax on non-Muslim subjects),**
  o **Banning music and art, and**
  o **Destroying Hindu temples.**
- When the Satnamis inflicted several defeats on the Mughal forces, **Aurungzeb himself took personal command and sent troops with artillery to suppress the revolt.**
- What followed was an attempt to kill every remaining member of the Satnamis. The remnants of the Satnamis fled in all directions, who remained totally disorganised and leaderless for a long time.

Revival of the Satnamis:

- The most important Satnami group was founded in **1820** in the **Chhattisgarh** region of central India by **Saint Ghasidas**, a farm servant and member of the lower (Chamar) caste.
- His Satnam Panth ("**Sect of the True Name**") succeeded in providing a religious and social identity for large numbers of members of Satnamis.
- Saint Ghasidas preached a code of ethical and dietary self-restraint and social equality and wrote **Nirvan Gyan** to propagate his teachings.
- As a result of connections with the Kabir Panth at different points in history, **Satnamis have complicatedly navigated their position within a larger Hindu hierarchy.**

6. National Health Claim Exchange

Why in news? The Health Ministry and the Insurance Regulatory and Development Authority of India (IRDAI) are collaborating to launch the **National Health Claim Exchange (NHCX).**
This digital platform aims to enable patients to access quality healthcare quickly and reduce out-of-pocket expenses. NHCX will connect insurance companies, healthcare service providers, and government insurance scheme administrators to streamline healthcare access and claims.

Current Claim Processing
- **Overview**
  o Currently, patients provide their insurance policy details or a card issued by a Third-Party Administrator (TPA) or insurance company when visiting a hospital.
  o For Pradhan Mantri Jan Arogya Yojana (PMJAY) beneficiaries, the card is **issued by the State Health Agency (SHA).**
  o Hospitals access specific claim processing portals to upload necessary documents for preauthorization or claim approval.
  o The **State Health Agency, insurance company, or TPA authenticates and digitizes the form using their internal portal, and the claims are adjudicated by the relevant team.**
  o In India, much of this process is manual, unlike many developed markets where over 90% of claims are auto-adjudicated.
- **Challenges of the Current Process**
  o The current process of exchanging claims lacks standardization across the ecosystem.
  o With most data exchange occurring through PDF/manual methods.
  o Additionally, there are no established health standards.
  o Processes vary significantly among insurers, TPAs, and providers.

National Health Claim Exchange (NHCX)
- **About**
  o The Health Claim Exchange Specification is a **communication protocol that facilitates the seamless exchange of health claim information between payers (insurance companies, TPAs, government scheme administrators), providers (hospitals, labs, polyclinics), beneficiaries, and other entities.**
  o It is designed to be interoperable, machine-readable, auditable, and verifiable, ensuring accurate and trustworthy information exchange.

- It is an **open standard-based communication protocol.**
- It aligns with IRDAI's goal of 'Insurance for All by 2047' and will support streamlined, paperless, and secure interactions between hospitals and insurers.
- **Standardized Healthcare Pricing:** Industry experts note that the platform will bring uniform data presentation and centralized validation of claims, leading to a more standardized approach to healthcare pricing.
  - This will improve efficiency, predictability, and transparency in healthcare costs.
- **Expected working**
  - The NHCX will act as a **gateway** for exchanging claims-related information among healthcare and health insurance stakeholders.
  - **Reduction in Claims Processing Costs:** It will **centralize** health claims, reducing administrative burdens on hospitals that currently use multiple portals.
  - Twelve insurance companies and one TPA have completed NHCX integration.
- **Settlement of cashless claims**
  - A new timeline mandates that all cashless insurance claims must be processed within three hours of receiving discharge authorization from the hospital.
    - The insurance regulator has given providers a deadline of July 31 to implement the necessary systems and processes.
  - The launch of both the National Health Claim Exchange (NHCX) and the time-bound insurance clearance is expected soon.
- **Incentives under NHCX**
  - To **promote digital health transactions and the digitization of patient health records, the National Health Authority introduced the Digital Health Incentive Scheme (DHIS) in January 2023.**
  - According to the Health Ministry, under the DHIS, there is a provision that hospitals receive financial incentives of ₹500 per insurance claim transaction through the NHCX or 10% of the claim amount, whichever is lower.

Why is NHCX being brought in?
- **Finding of a study**
  - **A paper titled 'Health Insurance Coverage in India: Insights for National Health Protection Scheme'** highlights the importance of health insurance in providing healthcare services and reducing high out-of-pocket expenses.
  - The paper notes that hospitalization cases are highest for those with private insurance (54.4 per 1,00,000 persons) overall.
  - Urban areas seeing the highest cases under government-funded schemes (60.4 per 1,00,000 persons), and rural areas experiencing higher cases for private insurance purchases (73.5 per 1,00,000 persons).
  - **Urban areas generally have higher in-patient cases compared to rural areas.**

Challenges
- **Improving the relationship between hospitals and insurance companies**
  - Health insurance **accounts for about 29% of the total general insurance premium income in India**.
  - The m**ain challenge is improving the relationship between hospitals and insurance companies, which requires digitization efforts, IT system upgrades, and workforce training.**
- **Other issues:** Issues like discharge delays and miscommunication that complicate matters.
- **Building trust** among policyholders depends on efficient service delivery.

7. Decoding Delhi's Water Crisis: Causes, Impact and Solution

Why in News?

The **Supreme Court directed the Himachal Pradesh government to release 137 cusecs of water it has in surplus and asked Haryana to do the needful to resolve the drinking water crisis in Delhi.**

This came after the AAP government in Delhi had approached the SC (alleging the BJP-government in Haryana for stopping Yamuna's water supply), amidst a surge in water demand during prolonged heatwave.

Where is the Water in Delhi Coming From, and Water Stress in Delhi?

- Delhi gets most of its water from the **Yamuna, Ravi-Beas and Ganga rivers**.
  - From the **Ganga**, via the Upper Ganga Canal in UP, Delhi receives 470 cusecs/ roughly 254 million gallons per day (MGD) of water.
  - Two channels (carrier lined channel (CLC) Munak and the Delhi sub-branch (DSB) canals) entering Delhi from Haryana supply Delhi (1094 cusecs) with water from the **Yamuna and Ravi-Beas**
  - **The Delhi Jal Board (DJB)** also takes water directly from the **Yamuna** and supplements its river-water supply with **ground water** drawn from Delhi's **tubewells and wells**.
- According to the Composite Water Management Index released by NITI Aayog in 2019, five of the world's 20 largest cities under water stress are in India, with **Delhi being second on the list.**

Reasons for Water Scarcity in Delhi:

- **Over-extraction of groundwater:** According to the Economic Survey 2023-24, Delhi has a daily water demand of 1,290 MGD, of which the DJB currently produces 1,000 MGD. The gap is met by Delhi's groundwater reserves.
- **Pollution of water sources:**
  - **High ammonia levels** (more than 2.5 parts per million) in the Yamuna have long contributed to poor water supply in parts of Delhi.
  - Numerous drains and rivulets **discharge toxic waste** from small and medium industries into the Yamuna river, eventually affecting Delhi's clean water supply.
- **Impact of climate change:**
  - According to the draft of the Delhi State Action Plan on Climate Change, the city is projected to incur economic losses of Rs 2.75 trillion by 2050 as a result of climate change impacts.
  - **Rising temperatures and erratic precipitation** patterns pose significant challenges to the city's water supply.
- **Inefficient water management:**
  - The Opposition alleges that the annual water shortage during summers is solely because of the inefficient water management of the state government.
  - The Central Water Commission's inefficient role in managing the three barrages in Wazirabad, ITO, and Okhla indicates **poor coordination and transparency among Delhi, Haryana, and Uttar Pradesh governments.**
- **Inter-state water disputes:** Water disputes between Haryana and Delhi have centred around the allocation of water from the Yamuna river. Haryana alleges that Delhi is drawing more water than allocated under various agreements.

- **Water treatment plant (WTP) capacity:** The WTP in North Delhi's Wazirabad was functioning below its capacity because the Yamuna did not have enough water (due to deficit rainfalls) for the DJB to draw from the Wazirabad reservoir.

Challenges Posed by Water Scarcity:
- **Health issues:**
  - With the reduced availability of clean water, marginalised communities living in unauthorised colonies often have to rely on unsafe water sources, leading to **waterborne diseases**.
  - Insufficient water supply also hampers the maintenance and cleanliness of public toilets. When water is scarce, sewage systems can fail, which increases the risk of diseases such as **cholera**.
- **Social and economic impact:**
  - Increased illness due to poor hygiene and sanitation leads to **higher healthcare costs** for individuals and the government.
  - Frequent illnesses **impact productivity** as people miss work or school, affecting their economic well-being and academic opportunities.
  - **The dependence on water tankers** for domestic needs can be unreliable and costly, leading to further economic strain for the marginalised communities.

What are the Solutions to Address Water Scarcity?
- **Water conservation and management:**
  - Recently, the Delhi government ordered a **crackdown on water misuse**, authorising inspection teams to fine offenders using pipes to wash cars, allowing water tanks to overflow, and using domestic water supply for construction.
  - The teams are also authorised to **disconnect illegal water connections at construction sites** or commercial establishments.
  - To stop waste discharge from entering Yamuna, the **National Green Tribunal (NGT)** and the State Pollution Control Boards need to take the initiatives.
  - **Water rationing strategies** must be announced during summer months.
- **Technological interventions:**
  - The DJB, in collaboration with Hitachi India, is using **field sensors and smart metres** at the Pitampura water distribution network.
  - Such technological intervention could **enable remote and real-time monitoring** and control of plant operations.
- **Infrastructure development:** The DJB can be **more commercially-oriented** and customers (households, businesses and industries) should be prepared to pay for the 'real cost' of supply. The DJB has recently increased infra charges for new water connections.
- **Policy and governance reforms:**
  - State and city governments should consider water resource availability in the region while creating city plans and providing permits for new establishments.
  - **They must restrict any development activities that are not sustainable in terms of water management.**
- **Community participation in rainwater harvesting:**
  - Delhi's rainwater harvesting potential amounts to a staggering 907 billion litres annually.
  - To effectively implement rooftop rainwater harvesting, various awareness campaigns can be organised at the community level.

8. Relationship Between the Harappan and the Vedic Age

Why in News? Archaeologists are working with Sanskrit scholars to decipher the Rigveda, carrying on research that could lead to a relationship between the people of the Vedic age and the Harappan civilization.
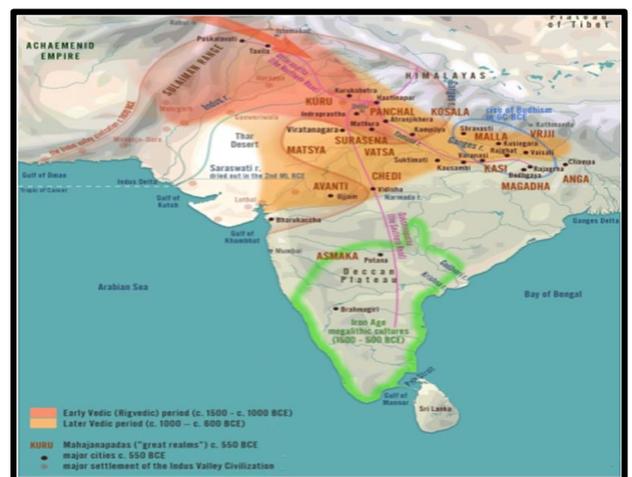
Indus Valley Civilisation (IVC)/ Harappa Civilisation (3300 - 1300 BCE):

- Also known as the Indus Civilisation, the IVC was a **Bronze Age civilisation** in the **northwestern regions of South Asia**.
  - The Indus civilisation is also known as the **Harappan Civilisation**, after Harappa (now in Punjab), which is the **first of its sites** to be excavated early in the 20th century.
- Together with ancient Egypt and Mesopotamia, it was **one of three early civilisations** of the Near East and South Asia, and the **most widespread among the three**.
  - Its sites stretch over an area spanning from today's northeast **Afghanistan**, through much of **Pakistan** and into western and northwestern **India**.
- It flourished in the basins of the **Indus River** and along a system of rivers that once coursed in the vicinity of the seasonal **Ghaggar-Hakra river** in northwest India and eastern Pakistan.
- The civilisation's cities were noted for their -
  - **Urban planning**,
  - Baked brick houses,
  - Elaborate drainage systems,
  - Water supply systems,
  - Clusters of large non-residential buildings,
  - **New techniques in handicraft** (carnelian products, seal carving) and
  - **Metallurgy** (copper, bronze, lead and tin).
- The urbanisation that accompanied the civilisation may have started as a result of the **region's soil gradually drying out** during the third millennium BCE.
- However, **the civilisation eventually declined** and its population dispersed eastward and southward due to weaker monsoons and a lower water supply.

The Vedic Age (1500 - 600 BCE):

- It is the period in the **late Bronze Age and early Iron Age** of the history of India when the Vedic literature, including the Vedas was composed in the northern Indian subcontinent.
- It lies between the **end of the urban IVC** and the **second urbanisation**, which began in the central Indo-Gangetic Plain (c. 600 BCE).
- In terms of literature, as well as social and cultural evolution, Vedic age is divided into two stages

- o **The Rigvedic period/ Early Vedic period** (between 1500 BC and 1000 BC) and
  - o **The Later Vedic period** (between 1000 BC and 600 BC).
- **The early Vedic Aryans** lived in the area known as sapta-sindhu/ an area of seven rivers - in and around present-day Punjab region.
- **During the Later Vedic period**, they gradually moved eastward and came to occupy eastern UP (Kosala) and north Bihar (Videha).

How Archaeologists are Establishing Relationships Between the Harappan and the Vedic Age?

Ongoing debates:
- The NCERT recently made a major addition (based on DNA evidence from the 4,600-year-old remains of a woman) to the Class 12 History textbook, indicating that **the Harappans were an indigenous people.**
- The NCERT has added a disclaimer that more research is required to establish this relationship.
- Some historians believe that the **Vedas date farther back to 2,500 BC/ 4,500 years ago, which would coincide with the IVC.**

What archaeologists are trying to establish?
Archaeologists are now working to test the hypothesis that the Harappans and the Vedic people were the same. According to the **renowned archaeologist Vasant Shinde**, a clear understanding of what is mentioned in **the Rigveda text is important to co-relate archaeological evidence unearthed in excavations of Harappan settlements.**

What evidence shows?
- While excavating the **site of Rakhigarhi (Haryana),** the archaeologists found evidence of ritual platforms and fire altars. Fire worship is also mentioned in Rig Vedic texts.
- The **mention of the river Saraswati (modern Ghagghar-Hakra river) is recorded at least 71 times in the Rigvedic text.** During archaeological excavations, a majority of Harappan settlements were discovered along the banks of river Saraswati.
- Another point of reference which may link the **Harappans with Vedic times is a set of animal bones found and studied by archaeo-zoologists in the Surkotada region of Kutch, Gujarat.**
- While some researchers stated that these bones belonged to a proper domesticated horse (which finds mention in Rigvedic texts), another group concluded that these were the bones of a wild ass.

9. Heatwaves are becoming more deadly

Why in news? Large parts of the country are witnessing a searing and longer-than-usual heatwave, with record-breaking day temperatures. Over the past few days, the heat has claimed lives in multiple states including **Delhi, Bihar, Odisha, and Gujarat.**

Heat waves
- **About**
  - o A **Heat Wave is a period of abnormally high temperatures, more than the normal maximum temperature**.

- o **Qualitatively**, heat wave is a condition of air temperature which becomes fatal to human body when exposed.
- o **Quantitatively**, it is defined based on the temperature thresholds over a region in terms of actual temperature or its departure from normal.
- **Criteria**
  - o As per IMD, heat **wave is considered if maximum temperature of a station reaches at least 40°C or more for Plains and at least 30°C or more for Hilly regions.**
  - o IMD uses following criterion to declare the occurrence of heat wave in the region:
    - ▪ **Based on Departure from Normal Heat Wave:**
      - ▪ **Heat Wave** - Departure from normal is 4.50°C to 6.40°C;
      - ▪ **Severe Heat Wave:** Departure from normal is >6.40degree C
    - ▪ **Based on Actual Maximum Temperature Heat Wave:**
      - ▪ **Heat Wave** - When actual maximum temperature ≥ 45°C;
      - ▪ **Severe Heat Wave**: When actual maximum temperature ≥47
- o If above criteria met at least in 2 stations in a Meteorological sub-division for at least two consecutive days and heat wave occurrence is declared on the second day.
- **Heat Wave in coastal region**
  - o When maximum temperature departure is 4.50C or more from normal, Heat Wave may be described provided actual maximum temperature is 37°C or more.

Heatwaves have become more deadly
- **Rising Humidity**
  - o As per the report, the increase in relative humidity in all zones has made heat stress worse in warm-humid and moderate climate zones.
  - o This increase has also nullified the fall in air temperatures in composite and hot-dry climate zones, especially during monsoons.
- **Spike in built-up area and corresponding Urban heat island effect**
  - o An **increase in the built-up area in cities is another factor contributing to the urban heatwaves**.
  - o The IPCC Working Group-II highlights that the urban heat island effect causes cities to have higher air temperatures than surrounding areas, particularly at night, which reduces their ability to adapt to climate change.
  - o Various studies have shown that cities, in particular, are getting warmer and more humid due to urbanization and declining green cover.
- **Increase in night temperature**
  - o Various studies found that **the difference between day and night temperatures in urban areas has reduced over a period of time.**
  - o These studies also pointed out the fact that an increase in green cover can moderate day-time heat.
  - o However, it is not that effective in arresting night-time heat due to increased concretization and heat released by these concretes at night.

Threats Posed by heatwaves
- **Human Health**
  - o **Extreme heat is one of the leading causes of weather-related deaths in many countries.**
    - ▪ In India, on May 31, at least 61 people died from suspected heatstroke across multiple states.
    - ▪ Among the victims were 23 poll personnel working during the final phase of the Lok Sabha election.

- o **High humidity and elevated nighttime temperatures** are likely key ingredients in causing heat-related illness and mortality.
  - o **Heatwaves are also associated with increases in heat-related illnesses**, including cardiovascular and respiratory complications and kidney disease.
- **Air quality**
  - o In extreme temperatures, air quality is also affected. Hot and sunny days can increase the production of ground-level ozone.
    - ▪ This ozone is a harmful pollutant that is the main component of smog.
    - ▪ It can **damage the respiratory system and is particularly harmful for those with asthma.**
  - o In addition, greater use of air conditioning requires more electricity which, depending on the electricity source, emits other types of pollution, including particulates that have an impact on air quality too.
- **Agriculture**
  - o High temperatures can be damaging to agriculture. Plant growth is negatively impacted by high daytime temperatures and some crops require cool night temperatures.
  - o **Heat waves also increase the chances of livestock experiencing heat stress**, especially when night time temperatures remain high and animals are unable to cool off.
  - o Heat waves can exacerbate droughts and wildfires, which can lead to negative impacts on the agriculture sector.
- **Energy**
  - o Warmer temperatures affect many aspects of the energy system, including **production, transmission, and demand.**
  - o While higher summer temperatures increase electricity demand for cooling, at the same time, they can lower the ability of transmission lines to carry power.
  - o This can possibly lead to electricity reliability issues like rolling blackouts during heat waves.
  - o In addition, as rivers and lakes warm, their capacity for absorbing waste heat from power plants declines.
    - ▪ This can **reduce the thermal efficiency of power production**.
    - ▪ This makes it difficult for power plants to comply with environmental regulations regarding the temperature of their cooling water, and could lead to plant shut-downs.

Building Resilience to Extreme Heat
- Identify vulnerable populations and create heat preparedness plans with all residents in mind
  - o These include steps like opening cooling centers during periods of extreme heat and adopting workplace heat stress standards.
- **Installing cool and green roofs and cool pavement** to reduce the urban heat island effect.
- **Planting trees to provide shade** and to cool the air through evapotranspiration.
- Pursuing energy efficiency to reduce demand on the electricity grid, especially during heat waves

General Studies II

1. Why has the NTA Failed to Deliver

Why in News?
With widespread allegations of cheating, paper leaks and other irregularities impacting flagship examinations such as the NEET (National Eligibility cum Entrance Test), the National Testing Agency (NTA) has come under intense fire.

The National Testing Agency (NTA):
- **Background:**
  - **In 2010**, a committee comprising directors of IITs recommended establishing an autonomous and transparent body (NTA) through legislation, modelled after the **Educational Testing Service (ETS) of the US**.
  - **Prior to the NTA's formation**, various government bodies like the UGC, the CBSE, and central universities such as Delhi University and JNU conducted their own entrance examinations.
- **About NTA:**
  - It was set up in **2017** as a **specialist, self-sustaining and autonomous organisation** under the aegis of the **Union Ministry of Education**.
  - It is registered under **the Societies Registration Act 1860**, and falls under the Right to Information (RTI) Act.
- **Objectives: It aims to**
  - Address the challenges of **assessing candidates' competence** by adhering to international standards, ensuring efficiency, transparency, and error-free delivery.
  - **Conduct efficient and transparent tests**, Research and development and Expert collaboration Information dissemination.
- **Examinations conducted by the NTA:**
  - JEE (Main), NEET-UG, Common Management Admission Test (CMAT), Graduate Pharmacy Aptitude Test (GPAT) and University Grants Commission-National Eligibility Test (UGC-NET).
  - **The National Education Policy 2020** envisaged a broader role, recommending that the NTA conduct an entrance or aptitude test for all universities across the country.
  - In all, the NTA now has charge for more than 20 examinations.
- **Who runs the NTA?**
  - Its director general and governing body are **appointed by the Union government**.
  - The core team of the NTA consists of test item writers, researchers, psychometricians, and education specialists.
  - The NTA operates six verticals, each focusing on different examinations.
  - Each vertical employs about six researchers, including internationally recognised experts in psychometrics and statistics.

Issues Faced by the NTA:
- **Conduct computer-based tests only**:
  - This is to ensure that high volume can be processed in a short period of time.

- As the NIC [National Informatics Centre] does not have the capacity or IT infrastructure needed, third-party technical partners are being engaged.
- However, third-party players **take accountability out of the government's hands** and leave loopholes in the system which can be exploited by unscrupulous players.
- **Agency is severely understaffed:** The agency was set up with only about 25 permanent staff positions and its functions have been outsourced to technical partners from the very beginning.
- **Absence of robust security mechanisms:**
  - **These are needed to handle a large-scale pen-and-paper examination, including the**
    - Setting of the question paper and its encryption,
    - Selection of external printing presses and exam centres,
    - Transportation to printing presses,
    - Storage and distribution to examinees at examination centres and
    - Then the collection and transportation of answer sheets to evaluation centres.
  - Each of these is a stage where malpractice can occur without robust security mechanisms.

- **NEET and UGC-NET exams irregularities:**
  - The NTA faced severe criticism after it **awarded grace marks to 1,563 candidates** in the NEET exam due to delays at seven examination centres.
  - **This decision led to accusations of inflated marks**, culminating in a record 67 candidates sharing the top rank.
  - The integrity of the NEET-UG was further compromised when the **exam question paper was allegedly leaked.**
  - Similarly, the UGC-NET exam was cancelled a day after being conducted, following reports that its integrity had been breached.

What Needs to be Done to Reform India's Examination Process?
- **Radhakrishnan committee:** The high-level panel headed by former ISRO chief K. Radhakrishnan has been constituted to recommend
  - Reforms in the examination process,
  - Improve data security protocols, and
  - Overhaul the NTA's functioning.
- **Adding manpower and infrastructure to the NTA:** To equip it to take on large-scale pen-and-paper examinations, as these are more equitable, especially for students in rural and remote areas with little access to technology.
- **Dismantling the centralisation process**: More decentralised structures are needed to meet the vastly differing needs of institutions.
- **More radical reform of the assessment system:** This includes
  - Periodic assessments of knowledge,
  - Concept-based understanding, and
  - Aptitude can be included in the final years of school education as the precursor to the admission process, etc.

2. 50th Year of the Imposition of Emergency in India

Why in News?

A dark chapter in modern Indian history that left a wide-ranging and lasting impact on Indian politics, **a state of Emergency declared by the then-PM Indira Gandhi on June 25, 1975, lasted for 21 months.**
India entered the fiftieth year of the imposition of the Emergency, which saw the suspension of civil liberties, curtailment of press freedom, mass arrests, the cancellation of elections, and rule by decree.

Emergency Provisions - Now and Then:
- **Under Article 352 of the Constitution of India,** the President may (on the advice of the Council of Ministers headed by the PM) issue a proclamation of emergency if the security of India or any part of the country is threatened by -
  - **War or**
  - **External aggression or**
  - **Armed rebellion.**
- **Article 358** frees the state of all limitations imposed by Article 19 ("Right to freedom") as soon as an emergency is imposed.
- **Article 359** empowers the President to suspend the right of people (except under Articles 20 and 21) to move court for the enforcement of their rights during an emergency.
- **In 1975**, the ground of "**internal disturbance**" (instead of armed rebellion) was available to the government to proclaim an emergency.
  - This was **the only instance of proclamation of emergency due to "internal disturbance".**
  - The other two occasions in which an emergency was proclaimed **earlier (on October 26, 1962, and December 3, 1971), were both on grounds of war.**
- This ground of "internal disturbance" was removed by **the Constitution (44th Amendment) Act 1978** by the Janata government that came to power after the Emergency.

Impacts of the Declaration of Emergency on India's Federal Structure:
- **Converts the federal structure into a unitary one:**
  - Though not suspended, the state governments come under the complete control of the Centre.
  - Parliament makes laws on subjects in the State List, and extends the Union's executive powers to the states.
  - The Union acquires the right to give any direction to state governments.
- **Term of Lok Sabha:** Parliament may by law extend the (five-year) term of Lok Sabha one year at a time.
- **Allocation of financial resources:** The President can modify, with parliamentary approval, constitutional provisions on the allocation of financial resources between the Union and states.

The Political and Social Circumstances in India Leading up to the Emergency:
- **January 1966:** Indira Gandhi elected prime minister.
- **November 1969:** The Congress splits after Gandhi is expelled for violating party discipline.
- **1973-75:** Surge in political unrest and demonstrations against the Indira Gandhi-led government.
- **1971:** Political opponent Raj Narain lodges complaint of electoral fraud against Indira Gandhi.
- **June 12, 1975:** Allahabad High Court found Gandhi guilty over discrepancies in the electoral campaign.
- **June 24, 1975:** Supreme Court granted a conditional stay on the Allahabad HC verdict, **declaring Gandhi's election to the Lok Sabha null and void.**
  - The SC also asked Gandhi to stay away from parliamentary proceedings.
- **June 25, 1975:** Declaration of Emergency by president Fakhruddin Ali Ahmed on the advice of Indira Gandhi.

- According to the government's press note, **certain persons were inciting the police and armed forces to not discharge their duties.**
- **June 26, 1975:** Indira Gandhi addresses the nation on All India Radio.

End of Emergency and Afterwards:
- **January 18, 1977:** Indira Gandhi calls for fresh elections and releases all political prisoners.
  - The elections of 1977 led to a comprehensive defeat for Indira and **Morarji Desai** became India's first non-Congress (Janata Party) Prime Minister.
- **March 23, 1977:** Emergency officially comes to an end.
  - **The Shah Commission**, constituted by the Janata government, found the decision to impose Emergency to be **unilateral and adversely affecting civil liberties.**
  - The Janata government (through the **44th Amendment**) reversed many of the constitutional changes effected by the 42nd Amendment Act 1976.
  - **For example,** it made judicial review of a proclamation of emergency possible again, and mandated that every proclamation of emergency be laid before both Houses of Parliament within a month of the proclamation.
  - **Unless it was approved by both Houses by a special majority** (a majority of the total strength of the House and not less than two-thirds of the members present and voting), the proclamation would lapse.

What Happened During the Emergency?
- **Suspension of civil liberties:**
  - Almost all opposition leaders (including JP) were detained and about 36,000 people were put in jail under the Maintenance of Internal Security Act (**MISA**).
  - Newspapers were subjected to **pre-censorship**.
  - In September 1976, Sanjay Gandhi initiated **a mass forced sterilization program** in Delhi.
- **Legal changes pushed through by Parliament:**
  - With the opposition in jail, Parliament passed **the Constitution (38th Amendment) Act** that barred judicial review of the Emergency.
  - **The Constitution (39th Amendment) Act** said that the election of the Prime Minister could not be challenged in the Supreme Court.
  - **The Constitution (42nd Amendment) Act** made changes to a range of laws,
    - Taking away the judiciary's right to hear election petitions,
    - Widening the authority of the Union to encroach on State subjects,
    - Made any law passed by Parliament to implement any or all directive principles of state policy immune to judicial review, etc.
- **Changes pushed through by the Courts:** In the famous case of **ADM Jabalpur vs Shivkant Shukla (1976)**, the SC ruled that detention without trial was legal during an emergency.

How did the Emergency Change Indian Politics?
- **Dented the Congress' reputation:** A party that led the struggle for civil liberties against the colonial state.
- **First non-Congress government:** The Janata experiment gave India its first non-Congress government, but its collapse also demonstrated the limits of anti-Congressism.
- **Emergence of young leaders:** The Emergency gave India a crop of young leaders (**Lalu Prasad Yadav, George Fernandes, Arun Jaitley, Ram Vilas Paswan, etc)** who would dominate politics for decades to come.

- **Coming together of the social forces:**
  - This resulted in the increase of the representation of OBCs in Parliament.
  - As a result, the Janata government appointed the **Mandal Commission** to look into OBC quotas, which would go on to make the rise of the OBCs in North India irreversible.
- **The Emergency has become a part of political vocabulary in India:** Every perceived act of high-handedness by a government being attributed to an "Emergency mindset".

3. Tamil Nadu Hooch Tragedy Points to the Need for a Public Health-Centred Approach to Alcohol

Context
- **India faces recurring tragedies**, from road accidents to monsoon flooding, **often attributed to an incompetent state unable to enforce laws.**
- Among these tragedies, **the recurrent calamities due to the consumption of illicit alcohol stand out,** highlighting both legal and moral failures.
- **The recent Kallakurichi hooch tragedy in Tamil Nadu, resulting in nearly 60 deaths,** underscores the severe consequences of these failures.

Historical Context of Alcohol Consumption in India
- **Ancient and Medieval Periods**
  - **References to alcohol, particularly a fermented drink called soma, appear in the Vedic texts and soma was considered a divine drink** and was consumed during religious rituals and ceremonies.
  - **The Rigveda, one of the oldest Indian scriptures, speaks of soma with reverence**, indicating its importance in the social and religious life of that era.
  - **During the Mughal period, despite the Quranic prohibition of alcohol, drinking was not uncommon.**
  - The **Mughal emperors and their courts indulged in wine and other alcoholic beverages,** imported from Persia and Central Asia, as well as locally produced drinks.
  - This **period saw a flourishing of a sophisticated drinking culture**, with alcohol integrated into the fabric of elite social life.
- **Colonial Period**
  - The **British colonial authorities sought to regulate and control the production and consumption of alcohol,** introducing new forms of liquor and establishing a taxation regime.
  - **Indigenous alcoholic beverages**, which were integral to community celebrations and cultural practices, **were stigmatised and restricted.**
  - The **colonial narrative framed these traditional practices as primitive**, promoting instead the consumption of gin and whiskey, distilled in industrial quantities and heavily taxed.
  - **This period also saw the birth of the term "Indian-made foreign liquor" (IMFL)**, which became a symbol of colonial influence.
  - **IMFL represented a blend of Western and Indian drinking cultures**, embodying the tensions between colonial control and indigenous practices.
  - The **British promoted these beverages among the Indian elite, creating a class of brown sahibs** who adopted Western lifestyles and drinking habits.
- **Independence and Prohibition Movements**

- o **The temperance movement,** which had been gaining momentum since the late 19th century, **found a natural ally in the independence struggle.**
- o **Leaders like Mahatma Gandhi,** who viewed alcohol as a social evil and a threat to moral integrity, **championed the cause of prohibition.**
- o **Gandhi's vision of a free India included a society free from the vices introduced by colonial rule**, with alcohol being a prime target.
- o When India gained independence in 1947, the ideals of the temperance movement were enshrined in the Constitution.
- o **Article 47 of the Directive Principles of State Policy urged the state to endeavour to bring about prohibition of intoxicating drinks** and drugs injurious to health.
- o **This made India the only secular and democratic country to constitutionally mandate such a directive,** reflecting the strong moral undertones of the independence era.
- **Modern Era and Contemporary Issues**
  - o **In the modern era, state policies on alcohol vary widely**, reflecting the ongoing tension between moral, cultural, and economic factors.
  - o **States like Bihar have experimented with prohibition**, driven by concerns over alcohol-fuelled domestic violence and public health.
  - o However, **these efforts often lead to unintended consequences**, such as the proliferation of illicit alcohol production and consumption.

Contradictory Excise Policies and Their Consequences
- **Prohibition and Its Implementation**
  - o After India gained independence, **the constitutional directive to promote prohibition of intoxicating substances was a nod to the moral and cultural values** espoused by leaders like Mahatma Gandhi.
  - o However, **the practical implementation of prohibition was delegated to individual states, leading to a patchwork of policies** that reflect a wide spectrum of approaches towards alcohol regulation.
- **Economic Considerations**
  - o **One of the most significant contradictions in alcohol policy arises from the economic benefits** that alcohol sales provide to state governments.
  - o **Alcohol excise is a major source of revenue**, often contributing significantly to the state's budget.
  - o **For instance, the government of Tamil Nadu generates substantial revenue through the Tamil Nadu State Marketing Corporation (TASMAC)**, which controls the sale of alcohol in the state.
  - o This **economic dependency creates a conflict of interest**, making it challenging to implement strict prohibition.
- **Social and Cultural Dimensions**
  - o **The societal perception of alcohol** consumption is **another area of contradiction.**
  - o On one hand, **traditional and moralistic views continue to stigmatise drinking**, associating it with moral decay and social vice.
  - o **On the other hand, urbanisation and globalisation have brought about a shift in attitudes, particularly among the younger generation** and urban elites, **who view drinking as a symbol of modernity and personal freedom.**
- **Impact on Health and Public Safety**
  - o **In states with prohibition, the consumption of illicit alcohol often leads to mass poisoning incidents**, as seen in the Kallakurichi hooch tragedy.

- o **The lack of regulatory oversight in the production of illicit alcohol results in dangerous concoctions** that can cause severe health issues and fatalities.
- **Surge in Illegal Moonshine Industries**
  - o **These contradictory policies have perpetuated the illegal moonshine industry,** driven by the high demand for alcohol in regions where it is criminalised.
  - o **Law enforcement agencies and political figures often collude with the mafia or fail to enforce the law,** with the poor bearing the brunt of these policies.
  - o **In Bihar, prisons are overcrowded with poor men arrested for drinking**, and most victims of hooch tragedies are impoverished.

Way Ahead to Address the Issue of Illicit Alcohol
- **Need for a National Consensus**
  - o Addressing this issue **requires a national consensus to balance public health science and personal freedoms.**
  - o **Lessons from other countries can guide this approach**. For instance, revisiting policies on cannabis, which India criminalized under U.S. pressure, despite its long history of use, could be insightful.
  - o **The U.S. now hosts the largest legal cannabis industry**, suggesting potential pathways for India.
- **Strict Quality Control**
  - o **Legalising alcohol consumption with strict quality controls and permitting indigenous alcohol production is crucial.**
  - o Concurrently, **enforcing zero-tolerance for alcohol-related offenses, such as bars selling to underage drinkers, is imperative.**
  - o **Shifting from the traditional in-patient deaddiction centres to evidence-based psychosocial interventions within the primary care network would also help** treat harmful drinking non-stigmatising.
- **Learning from International Experience**
  - o **Reflecting on international experiences**, such as the culture change in Britain during the late 1980s and 1990s regarding drink-driving, is instructive.
  - o **The UK extended pub closing hours and strictly enforced drink-driving laws,** leading to a societal shift where drink-driving became socially unacceptable.

Conclusion
- **The contradictory policies on alcohol in India reflect a deep-seated tension between moral imperatives**, economic interests, and social realities.
- **These contradictions have led to a range of unintended consequences, from the proliferation of illicit alcohol** and associated health risks to the reinforcement of gender and socio-economic inequalities.
- **Addressing these issues requires a comprehensive and balanced approach that integrates public health science**, respects personal freedoms, and learns from the experiences of other countries.

4. Role of a Lok Sabha's Leader of Opposition

Why in News?
Congress leader Rahul Gandhi is Leader of Opposition (LoP) in the 18th Lok Sabha, a position that lay vacant for 10 years because no party had numbers equalling a tenth of the strength of the House.

The LoP is the parliamentary chairperson of the largest political party/ coalition in the Lok Sabha that is not in government.

The Position of Leader of Opposition in Lok Sabha and Rajya Sabha:
- **Statutory recognition:**
  o It was officially described in **the Salary and Allowances of Leaders of Opposition in Parliament Act 1977**.
  o The Act describes the Leader of Opposition as:
    ▪ A member of the Council of States or the House of the People (as the case may be),
    ▪ Who is the Leader in that House of the party (having the greatest numerical strength and recognised as such by the Chairman/ the Speaker) in opposition to the Government.
- **Numerical strength:** According to a conventional understanding, in order to get the post of Leader of Opposition **a party must have at least 10% of MPs** in the House.
- **Debate over numerical strength:**
  o According to the former Lok Sabha Secretary General PDT Achary, the law is clear that the Speaker is required to recognise the leader of the **numerically largest party** in opposition as the leader of opposition.
  o **There is no such rule**, which requires a party to have at least 10% of the members of the House for recognising someone as the Leader of the Opposition.
  o Before the BJP in 2014 and 2019, the Congress (having 415 members in Lok Sabha) in 1984 denied TDP (with 30 MPs) the post of Leader of Opposition, on the basis of the above mysterious rule.
- **Salary and sumptuary allowances:** S/he shall be entitled to receive a salary and allowances as are specified in the Salary, Allowances and Pension of Members of Parliament Act 1954.

Powers of the Leader of Opposition (LoP) in the House:
- **Order of precedence:** The LoP in Lok Sabha and Rajya Sabha come at No. 7, along with
  o Union Cabinet Ministers,
  o The National Security Advisor,
  o The Principal Secretary to the PM,
  o The Vice-Chairperson of the NITI Aayog,
  o Former PMs, and Chief Ministers.
- **Sitting position in the House:**
  o **The LoP sits in the front row** to the left of the Chair, and enjoys **certain privileges on ceremonial occasions** like escorting the Speaker-elect to the rostrum (Chair of the Speaker).
  o The LoP is also entitled to a seat in the front row during the Address by the President to both Houses of Parliament.
- **The main duty of the LoP:**
  o It is to **serve as the voice of the opposition** in the House and is considered as **a shadow Prime Minister with a shadow Cabinet.**
  o This means, s/he is **ready to take over the administration** if the Government resigns or is defeated on the floor of the House.
  o Because the parliamentary system is based on "**mutual forbearance**" (acknowledging that we do not all have to agree on everything), the LoP is free to disagree while yet allowing the PM to rule.
  o **His/her proactive role** in facilitating smooth functioning of the business of the House is as important as that of the Government.

- **Practical role and responsibility:**
  - Most importantly, the LoP is the **opposition's representative in the high-powered committees** headed by the PM for appointment to key posts such as
    - The Director of CBI,
    - The Central Vigilance Commissioner and Chief Information Commissioner,
    - The Chairperson and Members of the National Human Rights Commission, and
    - The Lokpal.
  - S/he will also be a **member of crucial committees**, including Public Accounts, Public Undertakings, Estimates and several Joint Parliamentary Committees.

5. New project to fix water deficit in flagship Jal Jeevan Mission

Why in news?

Union Jal Shakti Minister has said that the government was conceiving a new project to ensure that rural households, which were provided taps under the ambitious Jal Jeevan Mission but had not yet been able to avail water, would soon be provided potable water.

Jal Jeevan Mission

- **About**
  - Jal Jeevan Mission is envisioned to **provide safe and adequate drinking water through individual household tap connections** by 2024 to all households in rural India.
  - It was **launched on August 15, 2019.**
  - The focus of this mission is on **assured and regular potable water service delivery at household level,** i.e., water supply in adequate quantity (55 litres per person per day).
  - JJM is a **decentralized, demand-driven, and community-managed programme** that aims to instil a 'sense of ownership' among the local community.
- **Nodal Ministry**
  - **Department of Drinking Water & Sanitation under the Ministry of Jal Shakti** is the nodal institution responsible for implementation of this mission.
- **Key detail**
  - The programme also implements source sustainability measures as mandatory elements, such as:
    - recharge and reuse through grey water management, water conservation, rain water harvesting.
  - The mission is based on a community approach to water and will include extensive **Information, Education and communication as a key component of the mission.**
  - JJM looks to create a **janandolan for water, thereby making it everyone's priority.**

  - **Focus activities**

JAL SHAKTI ABHIYAN
Campaign will cover both Rural and Urban Areas

The Focus Activities

- Targeted Communications Campaign
- Real Time monitoring dashboard
- Application of Space Technology
- Watershed development
- Intensive afforestation
- Water conservation & Rainwater harvesting
- Renovation of traditional & other water bodies/tanks
- Reuse borewell recharge structures

- **Measurement process**
  - o To measure water connections provided to households, State or Union Territory water supply departments collect data from districts and report it to the Jal Shakti Ministry.
    - ▪ This **data shows that 19 crore rural households have been given tap connections**.
  - o To verify this, villages, through their gram panchayats, self-certify if households actually receive water. This double-checks the state-provided figures.

Performance of the scheme
- **Status of tap water supply in rural homes**
  - o As of June 26, 2024, the **scheme had encompassed 77% of its target household**.
  - o Households with tap water connections as on June 26, 2024 – 14,91,32,648 (77.22%).
  - o However, it should be noted that there is a difference between a household getting a tap connection and the daily quota of 55 litres per person day of water being provided.
- **Har Ghar Jal Status**
  - o **Achieving the Har Ghar Jal Status means:**
    - ▪ all households have been connected,
    - ▪ the water supply department has certified water supply to homes, schools, and anganwadis, and
    - ▪ a gram sabha resolution has confirmed the department's claim.
- **Certified States/ UTs (certified by Ministry):** Goa, A & N Islands, Puducherry, D&NH and D&D, Arunachal Pradesh, Haryana, Punjab.
- **Reported States/ UTs**: Telangana, Mizoram, Himachal Pradesh, Gujarat.
  - o The Jal Shakti Ministry has a portal showing target achievements by States.
  - o According to this, out of **2,24,678 villages claiming 100% tap connectivity, only 1,21,974 have self-certified.**
  - o It is, however, unclear how many of the 19 crore households truly have functional tap water connections.

Challenges to JJM
- **Infrastructure Development**

- o Establishing the necessary infrastructure in remote and rural areas is a significant challenge.
- o This includes the construction of pipelines, water treatment plants, and storage facilities.
- **Water Quality**
  - o Ensuring the quality of water supplied through the taps is crucial.
  - o Contaminants like **fluoride, arsenic, and nitrates in groundwater sources pose health risks and require robust treatment solutions.**
- **Sustainabilit**y
  - o Maintaining the water supply systems and ensuring they remain functional over time is essential.
  - o This includes regular maintenance, timely repairs, and efficient management of water resources.
- **Funding and Resources**
  - o Adequate funding and resource allocation are vital for the success of the mission.
  - o Ensuring that states and local bodies have the financial and human resources to implement and maintain the systems is a continuous challenge.
- **Community Participation**
  - o Engaging local communities and ensuring their active participation in the planning, implementation, and maintenance of water supply systems is critical.
  - o Building awareness and training local stakeholders is necessary for the mission's success.
- **Geographical Challenges**
  - o Diverse geographical conditions across India, such as **hilly terrains, deserts, and densely populated areas, present unique challenges** in laying pipelines and ensuring a consistent water supply.
- **Data Accuracy and Verification**
  - o Accurately reporting and verifying the number of functional household tap connections is challenging.
  - o The self-certification process by gram panchayats is essential but can be prone to discrepancies.
- **Coordination Among Agencies**
  - o Effective coordination between various government agencies at the central, state, and local levels is crucial.
  - o Overcoming bureaucratic hurdles and ensuring seamless collaboration can be difficult.

6. Role Played by the Office of Deputy Speaker of Lok Sabha

Why in News?
Since the Opposition has become stronger in the 18th Lok Sabha, its members are vying for the office of Deputy Speaker.
However, the Opposition is forced to run for Speaker for the first time since 1952 because the government has been unwilling to extend any assurances on the post of Deputy Speaker.

Office of Deputy Speaker of Lok Sabha:
- **Appointment:**
  - o **Article 93** states that the House of the People shall (as soon as may be) choose two members of the House to be respectively **Speaker and Deputy Speaker.**
  - o **Article 178** contains the corresponding provision for the Speakers and Deputy Speakers in the state Assemblies.
  - o **It is a parliamentary convention** to elect a Deputy Speaker of the Lok Sabha from a party other than the ruling party to run an accountable democratic parliament.
- **Time frame to appoint a Deputy Speaker:**

o The Constitution **does not specify** a time frame for making the appointments and it is this gap in the provision that allows governments to delay or avoid appointing a Deputy Speaker.
o However, constitutional experts have pointed out that both Articles 93 and 178 use the words **"shall" and "as soon as may be"**.
o This means, not only is the election of the Speaker and Deputy Speaker **mandatory**, it must be held at the earliest.

- **Powers:**
  o According to **Article 95(1)**, the Deputy Speaker performs the duties of the Speaker if the post is vacant. **For example,**
    ▪ After the first Speaker (**G V Mavalankar**) died in 1956 before his term ended, Deputy Speaker M Ananthasayanam Ayyangar filled in for the remaining tenure of Lok Sabha from 1956 to 1957.
    ▪ Again, after **G M C Balayogi** (Speaker in the 13th Lok Sabha) of the TDP, passed away in 2002, Deputy Speaker P M Sayeed (of Congress) became acting Speaker for two months.
  o The **Deputy Speaker has the same powers as the Speaker when presiding over the House.**
  o All references to the Speaker are deemed to be references to the Deputy Speaker as well for the times when s/he presides.

- **Removal from the office:**
  o Once elected, the Deputy Speaker usually **continues in office until the dissolution of the House.**
  o Under **Article 94** (and Article 179 for state Assemblies), the Speaker or Deputy Speaker shall vacate his/her office if s/he ceases to be a member of the House of the People.
  o **They may also resign (to each other)**, or may be **removed from office** by a resolution of the House of the People passed by a majority of all the then members of the House.

Rules for the Election of the Deputy Speaker of Lok Sabha:
- **Election of the Speaker:**
  o The practice in both the Lok Sabha and state Assemblies has been to elect the Speaker in the **first session of the new House**.
  o **S/he is usually elected on the third day**, after the oath-taking and affirmations have taken place over the first two days.
- **The election of the Deputy Speaker:**
  o It is generally **not delayed beyond the second session** unless there are some genuine and unavoidable constraints.
  o However, there is **no bar on having this election in the first session** of the new Lok Sabha or Assembly.
  o **In the Lok Sabha**, it is governed by Rule 8 of the **Rules of Procedure and Conduct of Business in Lok Sabha** and shall be held on such date as the **Speaker may fix**.

Office of Deputy Speaker of Lok Sabha Held by the Opposition Since 1952:
- **From 1952 to 1969**, the first four Deputy Speakers were from the ruling Congress.
- **Between 1969 and 1977**, G G Swell of the All-Party Hill Leaders Conference served as Deputy Speaker.
- **From 1977 to 1979**, Godey Murahari of the Congress held the post when the Janata Party government was in power.
- **From 1980 to 1984**, the DMK's (a Congress ally at the time) G Lakshmanan held the post in the Indira Gandhi government.
- **In the 8th Lok Sabha (1984-89),**

- o AIADMK's Thambi Durai became Deputy Speaker when Rajiv Gandhi was Prime Minister.
  - o When Chandra Shekhar was Prime Minister (1990-91), Shivraj Patil (Congress) served as Deputy Speaker.
- **In the 10th Lok Sabha (1991-96)**, when P V Narasimha Rao was Prime Minister, S Mallikarjunaiah of the BJP was Deputy Speaker.
- **During the Congress-led UPA-I (2004-09) and UPA-II (2009-14) governments**, the Deputy Speaker's post was with the Opposition - first with Charanjit Singh Atwal of the Shiromani Akali Dal, and then with Kariya Munda of the BJP.
- **The 17th Lok Sabha** is the first and the only Lok Sabha which convened (from 2019 to 2024) without a Deputy Speaker.
  - o In **2023**, a bench led by CJI sought responses on a PIL that contends that not electing a Deputy Speaker is against the letter and spirit of the Constitution.

7. India's position with respect to the G-7

Why in news?
Leaders from the Group of Seven (G7) countries, which include **the U.S., Canada, Germany, France, Japan, the U.K., and Italy, met in Apulia, Italy, from June 13-15.**
The European Union leadership also joined the summit to talk about various issues. India has been invited to this event 11 times, and Prime Minister Narendra Modi attended for the fifth time.
The G-7 leaders met to discuss bridging differences between the "West and the Rest," funding the Ukraine war, investing in Africa, and **addressing migration, climate change, and artificial intelligence.**
They agreed to provide $50 billion for Ukraine from Russia's frozen wealth funds and held a summit to promote clean energy in Africa. **They criticized China's trade practices and met with leaders from 10 countries, including India, to discuss Global South concerns**.

Group of Seven (G7)
- **Origin**
  - o The origin of G7 lies in the **oil shocks of 1973 and the corresponding financial crisis**.
  - o In order to address the situation after oil shock, the heads of the **world's six leading industrial nations decided to hold a meeting in 1975**.
  - o These six nations were - the **US, UK, France, Germany (West), Japan and Italy.**
  - o These countries were **joined by Canada in 1976** and G7 came into existence.
- **Current Members**
  - o **US, UK, Canada, France, Germany, Italy and Japan** are the current members of this group.
  - o It can be said that the members of this group are the **most developed and the advanced economies of the world**.
  - o The **European Union is also represented** within the G7.

Significance of India for G7
- **Key Global South member**
  - o India has been a significant part of the G-7 process for years, gaining attention in the 2000s for its steady growth during the global financial crisis.
  - o Though not a G-7 member, India is a key Global South member and has hosted **the "Voice of Global South" conference since 2023.**

- **Part of G-20 troika**
  - It is also part of the G-20 troika with Brazil and South Africa.
- **Economic Growth and Stability**
  - India gained attention from the G7 in the 2000s due to its steady economic growth during the global financial crisis, demonstrating its resilience and potential as a major economy.
- **Strategic Partnerships**
  - India is part of the G-20 troika, along with Brazil and South Africa, which adds to its strategic importance in global economic and political discussions.
- **Regional Stability and Development**
  - India's involvement in the G7's outreach efforts can contribute to regional stability and development, particularly through investments and cooperation in areas like clean energy, trade, and economic development.
- **Geopolitical Balance**
  - India's participation helps balance global geopolitical dynamics, especially in the context of rising concerns about China's influence and trade practices.
  - India's strategic position and partnerships are crucial for maintaining global stability.

Significance of G7 for India
- **Crucial platform to highlight achievements and perspectives**
  - For India, the **G-7 outreach session is a crucial platform to highlight its achievements and perspectives.**
  - During the session, PM Modi emphasized the importance of Indian elections, technology, artificial intelligence, and addressing climate change.
- **Economic Significance**
  - As per one estimate (2018), the G7 nations account for
    - close to **60 percent of global net wealth** ($317 trillion),
    - **30 percent of global gross domestic product**, and
    - about 770 million people or 10 percent of the world's population.
- **Political Significance**
  - Political heavyweights are capable **of shaping the response of Multilateral challenges.**
  - In 1999, it created the Financial Stability Forum in order to manage the international monetary system
  - 47th summit in June 2021 had focused on the recovery from ongoing COVID-19 pandemic. It promised to **distribute 1 billion vaccines** to poorer countries.
  - Its theme was **Global Action to Build Back Better**.
- **Developmental Significance**
  - G-7 provided $300 million in 1997 to help build the containment of the reactor meltdown at Chernobyl.
  - G7 played crucial role in setting up a global fund to fight malaria and Aids in 2002.
  - In October 2020, G7 finance ministers backed an extension of a **G20 bilateral debt relief initiative for the world's poorest countries**
- **Advocacy for the Global South**
  - India uses the G7 platform to advocate for the **concerns of the Global South, such as economic inequality, climate change, and resource security.**
  - This advocacy helps ensure that the voices of developing nations are heard in global decision-making processes.
- **Technological and Climate Initiatives**

- India's participation in G7 discussions on technology and climate change allows it to contribute to and benefit from global initiatives aimed at addressing these critical issues.
  - It also provides an opportunity for India to share its innovations and approaches.
- **Showcasing Democratic Values**
  - By participating in the G7, India reinforces its commitment to democratic values and principles, aligning itself with other major democracies and highlighting the importance of democratic governance on the global stage.

Criticism faced by G7
- **Elitist, non-inclusive group**
  - The G-7 faces increasing criticism for being an **elitist, non-inclusive group that excludes three of the world's top 10 economies: China, India, and Brazil.**
  - Unlike the G-20, it lacks representation from a broader spectrum of the world.
- **Membership Issues**
  - The G-7 has not expanded its membership and even reduced it by dropping Russia in 2014.
  - In contrast, BRICS has expanded, now including **the UAE, Saudi Arabia, Iran, Egypt, and Ethiopia alongside the original members Brazil, Russia, India, China, and South Africa**.
- **Challenges to Relevance**
  - The G-7's inability to change the course of Russia's invasion of Ukraine, stop Israel's bombardment of Gaza, or deter China's global economic influence raises questions about its relevance and effectiveness.
- **Future Uncertainty**
  - The G-7's future effectiveness is uncertain, especially with potential leadership changes due to upcoming elections in the U.K. and the U.S.
  - The next **G-7 summit will be in Alberta, Canada, in 2025, and it remains to be seen if India will continue to participate on the sidelines.**

8. In the Name of Merit: An Overemphasis on Merit

Context
- **The Indian Constitution embodies the principle of social justice**, allowing the state to implement special provisions for the underprivileged.
- Despite the political motives often driving the expansion of reservation policies, **the judiciary has frequently intervened, emphasising the need for merit and efficiency in administration.**
- Therefore, **considering the recent Patna High Court order on 65% reservation, it is important to explore the complexities of India's reservation policies**, judicial responses, and the underlying tensions between constitutional mandates and socio-political realities.

Indian Judiciary's Response to Reservation Policies
- **The Strict Scrutiny Doctrine**
  - The **strict scrutiny doctrine employed by the Indian judiciary mandates that any policy affecting fundamental rights must be narrowly tailored** to achieve a compelling governmental interest.
  - **In the context of reservation policies, this doctrine has been used to assess whether the reservations are justified**, necessary, and whether they disproportionately affect other groups.
  - This **rigorous standard has led to the invalidation of several attempts by state governments** to extend reservations to various communities.

- **The 50 Percent Cap on Reservations**
  - o The **judiciary's steadfast adherence to the 50 percent ceiling** for reservations is another **critical aspect of its response.**
  - o This **cap was first articulated in the M R Balaji case of 1962,** where the Supreme Court deemed that **reservations exceeding 50 percent would violate the right to equality.**
  - o This **principle has been reaffirmed in numerous cases, such as Devadasan (1964), N M Thomas (1976), and Indra Sawhney (1992).**
  - o The **judiciary has maintained that while exceptions might be made** for remote or underdeveloped areas**, the 50 percent limit is generally sacrosanct.**
- **Recent Verdict of Patna High Court on 65% Reservation in Bihar**
  - o It **struck down the 65 percent reservation** in Bihar based on the 2023 Caste Survey.
  - o The **court held that the Nitish Kumar government's rationale**—that the Backward Classes constitute a major part of the state's population and are underrepresented in unreserved categories—**was insufficient**.
  - o The **judgment reiterated that the term proportionate representation is alien to Articles 15 and 16,** which emphasise "inadequacy of representation" rather than strict proportionality.
- **Exceptions and Nuances**
  - o Despite the rigid application of the 50 percent rule, **the Supreme Court has recognised the need for flexibility in certain contexts.**
  - o In **Indra Sawhney, the court acknowledged that this limit need not be religiously adhered to** in regions that are far-flung or outside the national mainstream.
  - o However, **the Patna High Court did not extend this leniency to Bihar,** despite its significant socio-economic challenges.
  - o The **court's decision underscores the need for governments to present compelling evidence and context-specific arguments** to justify deviations from established limits.

The Reservation Debates on Proportionate vs. Adequate Representation and the Efficiency and Merit Argument
- **Proportionate vs. Adequate Representation**
  - o The **judiciary's emphasis on adequacy of representation** over proportionate representation is **rooted in the landmark Indra Sawhney case of 1992.**
  - o The **Supreme Court in this case opined that adequate representation cannot be read as proportionate representation**, suggesting that reservations should aim to correct significant underrepresentation rather than mirror the exact demographic composition of backward classes.
  - o **This interpretation has guided subsequent judgments**, including the Patna High Court's ruling on Bihar's reservation policy.
- **The Efficiency and Merit Argument**
  - o Another significant judicial concern is the **potential impact of reservations on administrative efficiency and merit.**
  - o **Courts have often cited the need to balance affirmative action** with the maintenance of standards in public administration.
  - o **The Patna High Court, for instance, noted that merit should not be completely sacrificed.**
  - o This **view reflects a broader judicial apprehension** that excessive reservations might undermine the quality of governance.

- However, **critics argue that this perspective is based on unproven assumptions** and fails to recognise the broader social benefits of inclusive policies.

Judicial Flexibility and Recent Trends on Reservation Policies
- Recent judgments, such as the **SC's decision in the EWS case (2023) and Justice D Y Chandrachud's observations in B K Pavitra II (2019), indicate a gradual shift** towards a more nuanced understanding of merit and efficiency.
- Justice Chandrachud's call for redefining merit in terms of social good highlights the judiciary's evolving approach.
- Its **emphases inclusivity and social equity over rigid adherence to traditional notions of merit.**

Conclusion
- **The Indian judiciary's response to reservation policies illustrates the ongoing struggle to balance constitutional principles** with the practicalities of achieving social justice.
- While the strict **scrutiny doctrine and the 50 percent cap have shaped judicial intervention**, **recent trends suggest a growing recognition of the need for more flexible and context-sensitive approaches.**
- As India continues to grapple with deep-seated social inequalities, **the judiciary's role in shaping and refining reservation policies remains crucial.**

9. India – Bangladesh Bilateral Relationship

Why in the News?
- Bangladesh's Prime Minister Sheikh Hasina is on a two-day visit to India.

India – Bangladesh Bilateral Relationship:
India and Bangladesh share bonds of history, language, culture, and multitude of other commonalities.
- **Historical Ties:**
  - India's relationship with Bangladesh dates back to the 1971 **Bangladesh Liberation War when India provided crucial military and material assistance to help Bangladesh gain independence from Pakistan.**
  - However, the relationship deteriorated in the mid-1970s due to boundary disputes, insurgency, and water-sharing issues, especially after military regimes took control in Bangladesh.
  - Stability in bilateral relations was restored when Sheikh Hasina became Prime Minister in 1996, leading to the signing of the **Ganga Water Sharing Treaty**.
  - Since then, India and Bangladesh have strengthened their cooperation in various sectors, including trade, energy, infrastructure, connectivity, and defense.
- **Economic and Commercial Ties:**
  - **Bangladesh is India's largest trade partner in South Asia, with bilateral trade reaching USD 15.9 billion in FY 2022-23.**
  - Bangladesh exports approximately USD 2 billion to India annually.
  - In 2022, both countries completed a joint feasibility study on a **Comprehensive Economic Partnership Agreement (CEPA)**.
  - This agreement is crucial as Bangladesh will lose its Least Developed Country (LDC) status after 2026, which will impact its duty-free and quota-free access to Indian markets.
  - Consequently, **Bangladesh aims to finalize a Free Trade Agreement (FTA) with India.**

- **Power and Energy:**
  - o **Bangladesh imports 1160 MW of power from India**.
  - o Projects like the **Maitree Super Thermal Power Plant** and **India-Bangladesh Friendship Pipeline** are key initiatives.
  - o India supports Bangladesh's energy sector through various partnerships.
- **Development Partnership:**
  - o India has extended four Lines of Credit to Bangladesh amounting to USD 8 billion for infrastructure development.
  - o **High Impact Community Development Projects (HICDPs) are a significant part of India's assistance, focusing on human resource development and capacity building**.
- **Cultural Cooperation:**
  - o Cultural exchanges are facilitated through the **Indira Gandhi Cultural Centre and Indian Cultural Centre in Dhaka**.
  - o Programs in arts, dance, and language promote people-to-people contacts.
  - o The Bangladesh Youth Delegation program attracts young talent to visit India.

PM Sheikh Hasina's visit to India:
- Bangladesh's Prime Minister Sheikh Hasina is on a two-day visit to India.
- This will be the first incoming bilateral State visit by a foreign leader after the formation of the new government following the Lok Sabha elections.
- **Sheikh Hasina was among the seven leaders from India's neighborhood who attended the swearing-in ceremony at the Rashtrapati Bhavan on June 9.**
- During the bilateral meeting of Prime Minister Narendra Modi and Sheikh Hasina, Teesta water dispute is expected to be discussed.

Controversy on the Teesta Water Dispute:
- **Background:**
  - o The **Teesta River originates in the Pauhunri mountain of Sikk**im, flows through West Bengal, and enters Bangladesh, joining the Brahmaputra.
  - o It is the **second largest river in West Bengal after the Ganga**, making it crucial for both West Bengal and Bangladesh.
- **Historical Context:**
  - o India and Bangladesh have been negotiating the sharing of Teesta waters since the early 1980s.
  - o A water-sharing agreement was almost signed in 2011 during Prime Minister Manmohan Singh's visit to Bangladesh. However, it was halted due to last-minute objections by West Bengal's Chief Minister Mamata Banerjee.
- **Recent Developments:**
  - o In 2015, Prime Minister Narendra Modi visited Dhaka, accompanied by Mamata Banerjee, and expressed confidence in finding a fair solution.
  - o Despite efforts, the issue remains unresolved. In a recent interview, Prime Minister Hasina emphasized the need for India to be more accommodating to resolve the dispute.
- **Current Status:**
  - o **Bangladesh seeks an equitable share of the Teesta waters to ensure sufficient water flow during the dry season**.

- India's internal political dynamics, particularly the stance of the West Bengal government, play a significant role in the negotiations.
- **Importance of Teesta Waters:**
  - The **Teesta River is vital for irrigation and water supply in both countries.**
  - Sheikh Hasina recently urged India to show greater flexibility to resolve the issue.

10. Indian Diaspora in South Africa

Why in News?
In South Africa's most recent elections, a number of Indian-descent candidates from different political parties achieved notable success and secured electoral wins in the National Assembly and provincial legislatures.

History of Indian Diaspora in South Africa:
- The Indian diaspora in South Africa has a long and complicated history that **dates all the way back to the 19th century**.
- The first Indians were sent to South Africa by the British Empire as **indentured labourers** for the purpose of working on the sugar cane estates in Natal.
  - The indentured labour system was **a type of bonded labour** where workers were guaranteed a return trip to India when their contract had expired.
  - **But in reality**, many of them remained imprisoned in South Africa due to debt or other circumstances.
- **Between 1860 and 1911**, some 152,000 indentured labourers were transferred from India to South Africa.
- **Mahatma Gandhi**, who spent several years (practising law) in South Africa and formed many of his ideas about nonviolent resistance there, was one of the most well-known individuals from this era.

Identity Formation of Indian Diaspora in South Africa:
- **The indentured labourers** endured difficult working circumstances as well as a variety of discriminatory practises, such as limitations on their freedom of movement and the possession of property.
- **During apartheid** (from 1948 and until the early 1990s), the Indian community in South Africa was subject to a number of discriminatory laws and rules, including restrictions on their right to own property and freedom of movement.
- Notwithstanding these obstacles, **the Indian community in South Africa started to expand** - in numbers and in their socio-economic-political status. **For example,**
  - The South African Indian origin community **numbers around 1 million today** and constitutes about 3% of South Africa's total population.
  - About 80% of the Indian community lives in the province of KwaZulu Natal.
  - South Africans of Indian origin are **well-represented in Government, business, media, legal and other professions.**
- One area where the Indian community in South Africa has thrived is **education**.
  - Today, a large number of Indian students in South Africa are pursuing advanced degrees in fields like law, medicine and engineering.
  - This is helping South Africa in **developing its knowledge economy**.
- In general, the socioeconomic conditions of the Indian diaspora in South Africa are **complex and diverse**, reflecting both the challenges and opportunities that the country faces.

Challenges Faced by Indian Diaspora in South Africa:

- **Economic struggle:**
  - One of the main problems facing the Indian community in South Africa is **poverty**.
  - The most recent census figures show that many Indians in South Africa live barely over the poverty line, with about one in four of them living below it.
- **Cultural marginalisation:** Due to the country's education system's historical emphasis on Western culture, Indian culture and heritage are not adequately represented in schools and institutions.
- **Violence and hate crimes**:
  - **For example,** a wave of violence that broke out in Durban in 2019 led to the destruction of several Indian traders' shops.
  - According to reports, the attacks were carried out by locals who claimed that Indian traders were stealing their jobs and means of subsistence.

Recent Political Gains Made by Indian Diaspora in South Africa:
- Of the 87 parliament members of the Democratic Alliance (DA), **four are of Indian descent.**
- While **Mergan Chetty** won his third consecutive stint in parliament, **Shara Singh**, a member of Provincial Legislature from KwaZulu-Natal, graduated to national politics and became a member of parliament.
- While most of the elected members of Indian lineage were born in South Africa, **Anilkumar Kesava Pillai**, a native of Thiruvalla in Pathanamthitta district of Kerala, established himself in the local politics of the country 40 years ago.
- Meanwhile, some of the independent candidates and political formations that had espoused the cause of Indians failed to secure enough support.

General Studies III

1. Reasi and the Years-Old Issue of Cross-Border Terror

Context
- **The Reasi terrorist attack on June 9**, coinciding with Prime Minister Modi's third term oath-taking ceremony, **brings back memories of a similar attack on the Consulate General of India in Herat, Afghanistan, on May 23, 2014.**
- **Both incidents aimed to disrupt significant political events, revealing the ongoing and pervasive threat of terrorism** that India faces, particularly from groups based in Pakistan.
- Therefore, **it is important to explore the historical context, strategic responses, and diplomatic challenges India encounters in addressing terrorism, especially in the Jammu and Kashmir (J&K)**

Historical Context of Pakistan Sponsored Terrorism in India
- **The Origins of Terrorism in Jammu and Kashmir**
  - The **roots of terrorism in J&K can be traced back to the partition of India in 1947**, which led to the creation of Pakistan.
  - **The princely state of Jammu and Kashmir**, with its strategic location and diverse demographic composition, **became a contentious issue between the two newly formed nations.**
  - **The first Indo-Pak war in 1947-48 resulted in the establishment of the Line of Control (LoC),** leaving J&K divided between India and Pakistan.
- **The Afghan Jihad and Its Impact**
  - **The success of the Afghan Jihad in the 1980s,** where Afghan mujahideen, supported by the United States and Pakistan, **successfully resisted the Soviet invasion, had significant repercussions for India.**
  - **Pakistan's military and intelligence agencies**, emboldened by this success, believed that **similar tactics could be employed to challenge Indian control in J&K.**
  - This **led to the inception of a proxy war strategy**, wherein Pakistan began supporting and training Islamist militants to infiltrate J&K and carry out terrorist activities.
- **The Insurgency of the Late 1980s and 1990s**
  - The insurgency in J&K gained momentum in the late 1980s and early 1990s.
  - **This period saw a significant rise in violence,** with separatist **groups like the Jammu and Kashmir Liberation Front (JKLF) and later, Islamist militant organisations like Hizbul Mujahideen,** receiving **substantial support from Pakistan.**
  - The **Pakistani military and intelligence agencies provided training, arms**, and logistical support to these groups, facilitating cross-border infiltration.
  - **During this time, the region witnessed mass uprisings, targeted killings, and ethnic cleansing, particularly against the Kashmiri Pandit community,** which led to their mass exodus from the valley.
  - The **Indian state's initial response was marred by a lack of preparedness and coordination, resulting in significant casualties** among civilians and security forces.
- **Continued Terrorist Threats and Pakistan's Role**
  - **The Pakistan Army and its political leadership**, committed to the Kashmir cause, **continued to sponsor and support terrorist activities in the region.**

- o **High-profile attacks,** such as the 1999 Kargil intrusion and the 2001 attack on the Indian Parliament, **underscored the persistent and evolving nature of the threat.**
- o **The Kargil conflict, in particular, highlighted the extent to which Pakistan was willing to escalate tensions.**
- o Regular Pakistani troops, disguised as militants, infiltrated Indian positions in Kargil, leading to a full-scale conflict.
- o **India's decisive military response, reclaiming the occupied territories, demonstrated its resolve to protect its sovereignty.**

India's Counter Terrorism and Political Strategies
- **Early Responses and Challenges**
  - o **In the late 1980s and early 1990s, India was ill-prepared to handle the sudden surge in terrorist activities** in J&K.
  - o The **initial response was largely reactive**, with conventional police forces and under-prepared military units bearing the brunt of the attacks.
  - o **The complexity of the insurgency,** characterised by guerrilla warfare, hit-and-run tactics, and **widespread local support for militants, posed severe challenges.**
  - o During this period, **India faced significant casualties among civilians and security forces, and there were instances of human rights violations,** which further complicated the situation.
- **Development of Counter-Insurgency Strategies**
  - o **By the early 1990s, India began to develop** more **sophisticated counter-insurgency strategies.**
  - o This **included the creation of specialised units like the Rashtriya Rifles and the strengthening of paramilitary forces** such as the Central Reserve Police Force (CRPF) and Border Security Force (BSF).
  - o **These forces received specialised training in counter-terrorism operations**, intelligence gathering, and urban warfare.
  - o The **Indian Army also played a crucial role in these efforts**, conducting operations to flush out militants from their strongholds and secure key regions.
  - o **The establishment of the Unified Headquarters in Srinagar helped coordinate efforts between the Army, paramilitary forces, and the J&K police**, leading to more effective operations.
- **Intelligence and Surveillance Enhancements**
  - o **Improving intelligence capabilities became a priority for India** and the Research and Analysis Wing **(RAW) and the Intelligence Bureau (IB) were tasked with gathering actionable intelligence on militant activities**, both domestically and internationally.
  - o Enhanced surveillance technologies, including the use of drones, satellite imagery, and electronic surveillance, were deployed to monitor infiltration attempts along the Line of Control (LoC) and track militant movements within J&K.
- **Socio-Political Engagement and Development Initiatives**
  - o **Recognising that a purely military approach would not suffice, the Indian government also focused on political engagement** and socio-economic development in J&K.
  - o The **decision to hold Assembly elections in 1996 marked the beginning of efforts to restore democratic governance** and political normalcy in the region.
  - o **These elections were a significant step towards involving local populations** in the political process and reducing the appeal of militant ideologies.

Diplomatic Engagements and Their Challenges

- India and Pakistan's bilateral composite dialogue in 1998 included terrorism as a key issue.
- However, **Pakistan's unwillingness to address India's concerns became apparent early on,** reflecting its security doctrine of using terrorist groups against India.
- Despite this, **successive Indian Prime Ministers pursued diplomacy.**
- **Manmohan Singh's attempt to insulate bilateral relations through a joint anti-terrorism mechanism ultimately failed**, as public opinion often demanded military action after severe terrorist attacks, **such as the 2008 Mumbai attack and the 2001 Parliament attack.**

The Change in India's Stance on Pakistan Sponsored Terrorism
- **Shift Towards Military Pre-emption**
  - **India's departure from diplomatic restraint occurred after the 2019 Pulwama attack**, leading to the Balakot airstrike and the doctrine of pre-emption.
  - Earlier, **limited force was used in surgical strikes post-Uri attack in 2016**. These actions marked a shift towards pre-emptive strikes against imminent terrorist threats.
  - However, **defining what constitutes an "unacceptable" attack remains ambiguous.**
- **Global Recognition of Pak Sponsored Terror and India's Diplomatic Efforts**
  - **Pakistan's use of terrorism** against its neighbours is **generally recognised by the major powers.**
  - Its reliance on plausible deniability has not been sustainable for years.
  - **India too has given material linking Pakistani terrorist groups to terrorist incidents** but Pakistan has not taken action against them.
  - **This was clear after the Mumbai terrorist attack. After the Pathankot airbase attack in January 2016,** India allowed a Pakistani team which included an Inter-Services Intelligence officer to visit the airbase.
  - However, **Pakistan again did not take the investigation forward.**
  - Despite these cases, **it is important to pursue the practice of sharing information and evidence in terrorist cases to ensure the credibility of Indian assertions** with the international community.

Conclusion
- **The persistent threat of terrorism** from Pakistan **requires India to balance military responses and diplomatic efforts.**
- **External Affairs Minister S. Jaishankar's ambition to address cross-border terrorism highlights the need for global recognition of the terror threat** as a precursor to escalatory conflicts between nuclear-armed nations.
- **India's strategy must continue to evolve, combining force with diplomacy to mitigate terrorism** and promote regional stability.

2. RBI raises WMA limits of States/UTs

Why in news?
The Reserve Bank of India (RBI) has increased the **Ways and Means Advances (WMA) limits of State governments and Union territories to ₹60,118 crore from ₹47,010 crore.**
This decision is based on the suggestions from a group formed by the Reserve Bank, which included some state Finance Secretaries, and after reviewing the states' recent spending data. This increase will come into effect from July 1, 2024.

The RBI further said that Special Drawing Facility (SDF) availed by State Governments/ UTs will continue to be linked to the quantum of their investments in marketable securities, issued by the Government, including Auction Treasury Bills (ATBs).

Special Drawing Facility (SDF)
- SDF is a **type of short-term borrowing arrangement provided by RBI to state governments and Union Territories (UTs).**
- This facility is intended to help them manage temporary mismatches in their cash flows, similar to the Ways and Means Advances (WMA) but with different terms and conditions.
- SDF is **provided against the collateral of government securities** held by the state governments or Union Territories.
- The amount available under SDF is directly linked to the value of these securities.

Auction Treasury Bills
- Auction Treasury Bills (T-Bills) **are short-term debt instruments issued by the government to meet its immediate financial needs.**
- They are sold through a competitive bidding process, also known as an auction, conducted by RBI on behalf of the government.

Ways and Means Advances (WMA)
- **About**
  o Ways and Means Advances (WMA) are **temporary loan facilities provided by the RBI to the central and state governments to help them manage temporary mismatches in their receipts and expenditures.**
  o These borrowings are meant purely to help them to tide over temporary mismatches in cash flows of their receipts and expenditures.
  o **The WMA scheme was introduced on April 1, 1997.**
- **Legal provision**
  o **Section 17(5) of the RBI Act, 1934** authorizes the central bank to lend to the Centre and state governments subject to their being repayable "not later than three months from the date of the making of the advance".
- **Types**
  o **Normal WMA**: A fixed limit is set, and borrowing within this limit is charged at the repo rate.
  o **Special WMA or Special Drawing Facility**: Additional borrowing over and above the normal WMA, backed by the government securities held by the state government.
    ▪ After the state exhausts the limit of SDF, it gets normal WMA.

- **Key features**
  o **Duration:** The advances are **typically short-term, with a duration of up to 90 days.**
    ▪ If the amount is not returned within this period, it would be treated as an overdraft.
    ▪ The interest rate on overdrafts is 2 percentage points more than the repo rate.
  o **Interest Rates**: Interest rates on WMA are linked to the repo rate.
    ▪ **For Normal WMA:** interest rate = repo rate
    ▪ **For Special WMA:** interest rate = one percentage points less than repo rate
    ▪ **For overdraft: interest rate** = 2 percentage points more than the repo rate

- o **Limits**: The RBI, in consultation with the government, sets limits for WMA for both the central and state governments. These limits are reviewed periodically.
  - o **Number of loans**: Number of loans under normal WMA is based on a three-year average of actual revenue and capital expenditure of the state.
- **Benefits of WMA**
  - o **Liquidity Management**: Helps the government manage its day-to-day liquidity requirements, ensuring that short-term cash flow mismatches do not disrupt essential spending.
  - o **Fiscal Discipline**: Encourages better fiscal management as the governments are expected to repay the advances within a stipulated period, promoting timely receipt and disbursement of funds.
  - o **Interest Cost Savings**: The interest rate on WMA is typically lower than market borrowing rates, reducing the interest burden on the government.
  - o **Flexible Funding**: Provides a flexible source of funds for immediate and unforeseen expenditures without having to resort to market borrowings, which might be time-consuming and more expensive.
  - o **Market Stability:** By avoiding sudden large borrowings from the market, WMA helps in maintaining stability in the government securities market.
- **Limitations and Risks**
  - o **Short-Term Solution**: WMA is only a short-term solution and cannot be relied upon for long-term fiscal issues.
  - o **Repayment Pressure:** The need to repay within a short period might create additional pressure on the government's finances.
  - o **Interest Costs:** While the interest rate is lower than market borrowings, prolonged use of WMA can still add to the interest burden if not managed properly.

3. India Inclusion in JP Morgan EM Bond Index

Why in News?
India officially became part of JP Morgan's Government Bond Index-Emerging Markets (GBI-EM). The inclusion is likely to bring nearly $20-25 billion into the country (over the next 10 months) and will help India manage its external finances and boost foreign exchange reserves and the rupee.

Indian Bond Market - Challenges and Solutions:
- **Importance of bond markets:**
  - o They are a boon for corporate bodies and government entities, providing a **flexible and efficient way to raise capital.**
  - o One of the critical advantages for companies is the **avoidance of equity dilution.**
  - o Moreover, the cost of capital is reduced as the interest expenses on debt instruments are tax-deductible, making it a more attractive option than other forms of financing.
- **India's bond market:**
  - o India's bond market is pivotal in the country's economic structure.
  - o As of September 2023, the government bond market **size stands impressively at $1.3 trillion**, with corporate bonds at $0.6 trillion.
- **Challenges in Indian bond markets:**
  - o Narrow investment base,
  - o Insufficient participation by foreign investors,
  - o Virtually absent secondary market and

- o Private placement (a sale of stock shares or bonds to pre-selected investors and institutions rather than publicly on the open market).
- **Panacea:**
  - o Inclusion in the Global Indices
  - o Presence of market makers on both buy and sell-side
  - o No credit default swaps
  - o **Bonds bhi 'Sahi Hain':** A marketing campaign which can catch the eyeballs of all the age groups of the society.
  - o Credit enhancement frameworks
  - o Incentivising the issuer

What is the JP Morgan Emerging Market Index?
- **Created in the early 1990s**, it is the most widely referenced index for emerging market bonds and has become benchmarks for local market and corporate EM bonds.
- **It began with the issuance of the first Brady bond** - denominated in U.S. dollars and issued by developing countries and backed by the U.S. Treasury bonds.
- **It has since expanded to include** the GBI-EM (in 2005) and the Corporate Emerging Markets Bond Index (CEMBI).

What was JP Morgan's Announcement?
- JP Morgan has announced that it would include **Indian Government Bonds (IGBs)** to its emerging markets bond index (starting June 28, 2024).
- **There are 23 IGBs that meet the index eligibility criteria**, with a combined notional value of approximately Rs 27 lakh crore or $330 billion.
- **Only IGBs designated under the Fully Accessible Route** (FAR was introduced by the RBI in 2020 to enable non-residents to invest in specified Government of India dated securities) are index-eligible.

Impact of IGBs Inclusion:
- India is expected to reach the **maximum weight of 10%** in the GBI-EM Global Diversified Index (GBI-EM GD).
- A higher weightage will prompt global investors to **allocate more funds** (~ $ 2-3 billion flows to India every month) for investment in Indian debt.
- It will not only result in **lower risk premia**, but will also **help India to finance its fiscal and current account deficit (CAD).**
- **It will also help India to enhance the liquidity and ownership base** of government securities (G-secs; debt instruments issued by the central government to meet its fiscal needs).
- The inclusion of certain Indian sovereign bonds will **support a diversification of the investor base** for Indian government securities.
- **It could help lower funding costs slightly**, and support further development of domestic capital markets.

Will Higher Inflows be a Concern for RBI?
- When the Reserve Bank of India (RBI) removes dollars from the market, it must release an equal amount in rupees.
- This means, while higher inflows will boost the rupee, the RBI will have to use the instruments in its armoury **to check the resultant inflationary pressures.**

4. Impact of Coal Mining Pollutants on Workers

Why in the News?

Prolonged exposure to coal mining pollutants has resulted in widespread respiratory and skin diseases among the workers and people in six districts in India, where coal extraction is a major occupation.

About the Study:

- A survey was conducted by the **National Foundation for India** which is an organisation that works on social justice issues.
- It conducted a survey, involving 1,200 households, to study the prolonged exposure to coal mining pollutants on the mining workers.
- The six districts covered for the survey were **Koriya and Raigarh (Chhattisgarh), Dhanbad and Ramgarh (Jharkhand), Angul and Jajpur (Odisha).**
- The surveys, on average, spanned 18-20 villages per district.
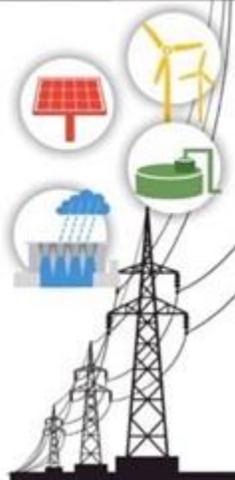
Key Findings of the Study:

- **Impact on Marginalised Communities:**
  o It was found that 81.5 per cent among those surveyed belonged to the **marginalised SC, ST, and OBC communities and the rest were from the general category.**
  o The survey found lower levels of income and educational attainment among SC and ST groups compared to OBC groups, and their higher representation in low-paying, irregular jobs in coal-dumping yards, coal sidings, coal loading, coal transport, coal washeries and other informal work.
  o This disparity, the report said, indicated the **challenges that marginalised groups will face as India gradually phases down coal use**, resulting in significant job losses and economic downturns in coal-dependent regions.
- **Impact on Health:**
  o People living closer to the mines were relatively more vulnerable.
  o **Dhanbad and Ramgarh**, which had more people living in such zones, had higher incidence of lung and breathing-related diseases as well as skin infections.
  o At least 65**% of participants interviewed reported issues such as chronic bronchitis, asthma, and skin ailments such as eczema, dermatitis and fungal infections.**
  o On average, a household in these districts spent ₹300 to ₹1,000 on monthly medical-related bills.
  o The average annual hospitalization expenses in Dhanbad (₹28,461 per household) were the highest.
- **Shift from Coal:**
  o The m**ain goal of the study was to explore the concept of a 'just transition' – finding effective and sensitive ways to help individuals who depend on coal mining to move away from these jobs.**
  o As the world moves away from coal, significant job losses and economic declines are anticipated in coal-dependent regions.
  o This shift will affect not only coal miners and workers directly but also the wider local economy.

India's Dependence on Coal for Energy Supply:

WHERE POWER COMES FROM
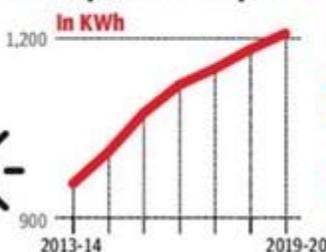India's power generation by source (1 trillion units of electricty)

Fuel	2014	2015	2016	2017	2018	2019	2020
Biomass and waste	26	17	16	13	16	15	14
Coal	824	872	936	973	1025	999	948
Gas	43	41	50	50	50	48	52
Hydro	130	132	129	136	141	162	164
Nuclear	35	38	38	38	38	45	45
Other fossil	2	0	0	0	0	0	0
Other renewables	0	0	0	0	0	0	1
Solar	6	7	12	22	36	46	58
Wind	37	33	43	53	60	63	60
Total	1,103	1,140	1,224	1,286	1,368	1,378	1,342

Installed generation capacity (megawatts)

	Capacity	% of capacity
Coal	2,09,034.5	53.49
Renewables	1,03,055.4	26.37
Hydel	46,512.2	11.9
Gas	24899.5	6.37
Nuclear	6,780	1.73
Diesel	509.7	NA

Per capita consumption
In KWh
1,200
900
2013-14   2019-20

Coal consumption in 2020-21 (million tonne/year)
Domestic pruduction
596.22
Imports
215.25

Sources: Ember, Govt data, CEA, Coal Controller's Organisation

- While renewable energy capacity is dramatically increasing, coal still provides around 70 per cent of the country's electricity.
- Coal is expected to account for at least 21 per cent of India's electricity requirements even by 2050.
- **Easily Available Source of Power**:
  o Coal can help the country meet its energy needs without depending on imports as it is abundantly available domestically.
  o Alternatives like nuclear energy have been hampered by high costs and safety concerns.

- **India's Developmental Needs**:
  o To lift millions of people out of poverty, India needs energy.
  o The **International Energy Agency (IEA) predicts that between 2020 and 2040, India will have the largest growth in energy demand of any country in the world.**
  o To meet this demand, India will need to rely on a variety of energy sources—both conventional and renewable.
- **Source of Employment**:
  o Beyond providing desperately needed energy, **coal is also a vital source of jobs and economic growth and a driver of industrialization, just as it was in developed countries**.
  o Around 4 million people in India are employed either directly or indirectly in the coal sector.
  o Other than active workers, another 500,000 Indians rely on the coal sector for their pensions.
- **Source of Revenue for the Government**:
  o **Coal India Limited** is the **largest coal mining company in the world.**
  o The coal sector is a major source of revenue for States and the Central Government.

5. What Government Must Understand: In Andamans, It Can Protect National Security and Ecology

Context
- **India's strategic and economic landscape has been significantly shaped by its geographical features**, among which the **Andaman and Nicobar (A&N) Islands hold a crucial position.**
- Despite their strategic importance, **these islands have historically been neglected by Indian policymakers.**
- Therefore, **it is important to delve into the historical oversight, the strategic necessity, and the recent developmental plans for the A&N Islands, highlighting their potential as a cornerstone of India's maritime strategy** and economic development.

Historical Context and Strategic Importance of A&N Islands
- **Early Recognition of Strategic Value**
  - **Sardar K. M. Panikkar,** a visionary historian and diplomat, **underscored the significance of these islands as early as 1945.**
  - Panikkar argued that control over the Indian Ocean and effective defence of India's coastline could only be achieved by **establishing advanced bases on the A&N archipelago.**
  - He pointed out **that the islands' location in the Bay of Bengal provided a strategic vantage** point for maritime operations and coastal defence.
  - **His foresight highlighted the potential of the A&N Islands to act as a maritime sentinel**, overseeing vital sea lanes and ensuring the security of India's eastern seaboard.
- **Evolution of Strategic Policies**
  - **It was only in the later decades that India began to acknowledge the strategic imperatives** of the A&N Islands.
  - The **economic opportunities in Southeast Asia and the ASEAN region, coupled with growing seaborne trade and energy interests** in the Asia-Pacific, **led to the formulation of the Look East and Act East policies.**
  - **These policies aimed at strengthening economic and strategic ties with East and Southeast Asian countries**, thereby increasing the importance of the A&N Islands as a strategic asset.
- **Military Realisation Post-Kargil**
  - **The realisation of the A&N Islands' strategic importance** was starkly brought to the forefront following the **near-disaster of the Kargil conflict in 1999.**
  - The **conflict highlighted the gaps in India's defence preparedness** and underscored the need for a robust military presence in the strategically located A&N Islands.
  - **In response, the Indian government established the Andaman and Nicobar Command (ANC)** in 2001, a joint tri-service command based in Port Blair.
  - **This move was a significant step towards integrating the defence capabilities** of the navy, air force, and army in the region, although it faced initial resistance and neglect.
- **Renewed Focus and Fortification**
  - **Recent years have seen a renewed focus on fortifying the ANC** and enhancing the strategic infrastructure across the A&N Islands.
  - **Efforts are underway to establish naval and air force bases from Shibpur** in the north to Port Blair, Car Nicobar, Kamorta, and Campbell Bay in the south.

o **These developments aim to transform the A&N Islands into a formidable eastern maritime bastion,** capable of guarding the Malacca Straits and ensuring maritime security in the region.

Neglect and Complacency Towards A&N Islands
- **Post-Independence Neglect**
  o **Despite Panikkar's warnings, India's early post-independence years saw a significant neglect of the A&N Islands.**
  o **Several factors contributed to this oversight. The nascent nation was preoccupied with more immediate concerns, such as its adversarial relationship with Pakistan**, which required attention to its western borders and waters.
  o **Additionally, India had extensive trading links and a large diaspora in the Persian Gulf,** drawing its focus westward.
  o The **country also maintained traditional ties with Indian Ocean Island nations and the East African littoral**, further diverting attention from the eastern maritime expanse.
- **Maritime Remoteness and Tenuous Hold**
  o **One of the primary reasons for the neglect** of the A&N Islands was their **perceived maritime remoteness.**
  o The geographical isolation of these islands posed logistical challenges for their administration and defence.
  o **Great Nicobar Island, the southernmost of the A&N group, is situated a mere 140 kilometres from Indonesia but is almost 2,000 kilometres from Chennai**, highlighting the significant distance from the Indian mainland.
  o **This remoteness made it difficult for the central government to maintain a strong administrative** and military presence.
  o Furthermore, **India's hold on the A&N Islands was tenuous in the early years post-independence.**
  o **In 1947, Britain considered retaining the islands as a Crown possession** even after Indian independence, indicating their strategic value.

The Holistic Development of Great Nicobar Island, Economic Potential and Development Challenges
- **The Holistic Development of Great Nicobar Island**
  o Recently, a **plan for the Holistic Development of Great Nicobar Island was unveiled by the NITI Aayog.**
  o This Rs **75,000 crore project aims to establish infrastructure** including an international container transshipment terminal, an international airport, power plants, new cities, a coastal transport system, and a free trade zone.
  o **While this project promises significant economic and strategic benefits, it has faced opposition from environmentalists and civil society groups** concerned about its impact on the local ecology and indigenous tribes.
- **Economic Potential and Development Challenges**
  o The **A&N Islands have vast maritime resources, with an Exclusive Economic Zone (EEZ) of 600,000 sq km**, accounting for 30% of India's total EEZ.
  o The waters are rich in marine life and potential hydrocarbon resources.
  o However, **the islands' economic development must balance sustainability and the preservation of indigenous tribes like the Onge, Jarawa, Sentinelese, and Shompen.**
  o Traditionally, tourism and fisheries have been the most sustainable avenues for development.

Critical Consideration to Balance the Ecology and Development of A&N Islands

- **Sustainable Development Practices**
  - **Emphasising sustainable development practices is crucial** for the A&N Islands.
  - Tourism and fisheries have traditionally been considered sustainable avenues for revenue and employment generation.
  - **Any new development projects should integrate sustainability principles**, ensuring that the ecological balance is maintained, and the livelihoods of local communities are enhanced.
  - **Ecotourism, sustainable fisheries, and renewable energy projects could be prioritised over heavy industrial** and infrastructural developments.
- **Replicating Successful Models**
  - **Aspiring to replicate the success of duty-free ports and free trade zones like those in Singapore or Hong Kong** in the remote GNI faces **practical challenges.**
  - These **established hubs benefit from robust industrial back-ups**, extensive hinterlands, and strategic locations along major global trade routes.
  - **GNI, on the other hand, is 2,000 km from Chennai and Kolkata**, with limited industrial and logistical support.
  - **The travails of Sri Lanka's Hambantota port and airport projects, which have faced significant financial and operational challenges**, serve as a cautionary tale for such ambitious projects in GNI.
- **Viability of a New Transshipment Terminal**
  - The **viability of establishing a new transshipment terminal in GNI is another critical issue.**
  - **GNI is equidistant (1,300 km) from established transshipment hubs** and bunkering ports such as Singapore, Port Klang in Malaysia, and Hambantota in Sri Lanka.
  - The **proximity to these well-established hubs raises questions** about the necessity and economic feasibility of a new terminal.
  - Moreover, **India has recently commissioned a transshipment terminal in Vizhinjam, Kerala, with great expectations.**
  - **The success of this terminal should be evaluated before embarking on a similar venture** in the remote and ecologically sensitive GNI.

Conclusion

- The Andaman and Nicobar Islands **hold immense strategic and economic potential for India.**
- **A balanced approach that addresses both security and sustainable development is essential** for harnessing this potential.
- **By considering alternative development strategies** and ensuring the protection of the islands' unique ecological and anthropological heritage**, India can transform the A&N Islands into a strategic asset and a model of sustainable development.**

6. Human-Animal Conflict

Why in the News?

The installation works for the country's first Artificial Intelligence (AI)- based smart fence project, called **'Ele-fence'**, is underway in Wayanad to mitigate the accelerating human-wildlife conflict in the region.

About Human-Animal Conflict:
- Human-wildlife conflict refers to the **unfriendly situation between people and animals, resulting in undesirable effects not only for animals but also for humans**.
- For example, **crop loss, livestock predation, injury, or death, as well as the killing of wildlife, can be some of the aftermath.**
- Such conflicts occur when human activities expand into the habitat of animals and the human population increases and starts to come into contact with wildlife in these dominated areas.
- The man-animal conflict has profound consequences not only on the immediate wildlife but also on the entire ecosystem and socio-economic systems of the affected areas.
- In addition, farmers who have experienced livestock predation lose an opportunity to feed their families. Rural and agricultural communities struggle to stay in business due to crop depredation.

High Rates of Human-Animal Conflict in India:
- Several Indian states have reported a significant surge in man-animal conflicts:
- **Uttarakhand**:
  o In 2022, **the state reported 700 incidents of man-animal conflict.**
  o At the beginning of 2024, three fatalities and 15 injuries prompted a high alert in the region.
- **Himachal Pradesh**:
  o The state has experienced a notable rise in such conflicts, with **34 deaths caused by leopard attacks.**
  o Additionally, 367 injuries were reported, including 99 grievous injuries.
- **Karnataka**:
  o The state is currently facing an intense social movement addressing man-animal conflict.
  o In **2022, 92 human fatalities and 126 animal deaths were recorded by the forest department.**
  o The proximity of **urban areas to national parks and reserves, along with rapid urbanizatio**n, exacerbates the issue.
- **Kerala**:
  o In 2022, the **state witnessed 58 human deaths and 117 animal deaths due to conflicts.**
  o Factors such as growing urbanization, shrinking animal habitats, overcrowding, and climate change are worsening the situation.

Factors Contributing to Rise in Human-Animal Conflict:
- **Rapid industrialization and urban development** have fragmented and destroyed animal habitats, forcing wildlife into human settlements in search of food, water, and shelter.
  o Expanding human activities increasingly encroach upon natural habitats, heightening the likelihood of conflict.
- This delicate balance between humans and animals has been further disrupted by **climate change and environmental degradation**, intensifying these conflicts.
  o Negative interactions are exacerbated by changing weather patterns, depletion of natural resources, and altered animal migration routes.
- **Ineffective enforcement of wildlife conservation and habitat preservation laws** contributes significantly to the rising number of man-animal conflicts across the country.
  o Weak law enforcement, insufficient funding, and poor collaboration among stakeholders hinder effective conflict management.
- Moreover, the **growing human population** and the corresponding demand for land and resources put additional pressure on wildlife habitats, leading to more frequent encounters between humans and animals.

Legal Provisions w.r.t. Human-Animal Conflict:
- Our Constitution strengthens the bond between every citizen and nature, embedding this relationship as a fundamental duty under **Article 51A(g)**.
- This principle was reinforced in the Supreme Court cases **Animal Welfare Board of India vs. A. Nagaraja & Ors**. (2014) and **State of Gujarat v. Mirzapur Moti Kureshi Kassab Jamat** (2005).
  - In these cases, the Court recognized that **animals deserve rights similar to those of humans**, emphasizing their welfare and granting them legal status or "persona."
- The **2006 amendment to the Wildlife Protection Act of 1972 indirectly addressed wildlife corridors, which facilitate the safe movement of tigers and other wild animals**.
  - However, implementing these corridors has faced numerous challenges, including delays in notification, inadequate policies and legal frameworks, insufficient funding, and lack of cooperation among government agencies.

Conclusion:
- Man-animal conflict is a complex issue that necessitates a **comprehensive approach, involving collaboration among government agencies, wildlife organizations, local communities, and legal and judicial stakeholders**.
- By adopting a holistic strategy that balances the rights and interests of both humans and animals, India can foster harmonious coexistence, preserving its rich biodiversity while ensuring the well-being of its citizens.
- **Ongoing monitoring, research, and adaptive management strategies** are crucial to addressing the evolving challenges of sustainable development and wildlife conservation.

Ele-fence in Wayanad:
- The first AI-based smart fence project, named '**Ele-fence**,' is being set up in Wayanad to reduce human-wildlife conflict.
- This pilot project, led by White Elephant Technologies and supported by the Kerala Forest Department, is located in the **Chethalth forest range of south Wayanad**.
- The Ele-fence spans 70 meters and combines real-time monitoring with preventive and protective features. It is designed after studying elephant behaviour in conflict situations.
- The **fence includes six-inch-wide steel girders that are 17 feet high and reinforced underground for strength.**
- The AI-based system **uses logical trip wires, 4K cameras, and sound and alarm lights to detect and deter elephants**. It also alerts pedestrians and motorists about nearby elephants.
- The lasher belt technology prevents elephants from breaking through the fence. When elephants approach within 50-60 meters, cameras capture live visuals and trigger alarms, warning local residents and notifying forest officials and Rapid Response Teams in real time.
- Previous methods like **trenches, walls, and solar fencing were not fully effective, so this project aims to provide a better solution and could be expanded across the state if successful.**

7. India's First Joint Doctrine for Cyberspace Operations

Why in News? The Chief of Defence Staff General Anil Chauhan released India's first joint doctrine for cyberspace operations, acknowledging that cyberspace has emerged as a crucial and challenging domain in modern warfare.

What is Cyber Warfare?

- **Meaning:**
  - o **Cyber warfare** are actions taken in cyberspace (dynamic and virtual space that connects the different computer systems) by state or non-state actors that
    - ▪ Either constitute a serious threat to a nation's security or
    - ▪ Are conducted in response to a perceived threat against a nation's security.
  - o Unlike territorial limits in the traditional domains of warfare (such as land, sea, and air), **cyberspace is a global common and hence has shared sovereignty.**
  - o Hostile actions in cyberspace **can impact the nation's economy, cohesion, political decision making**, and the ability to defend itself.

- **Types of Cyber warfare:**
  - o **Cyber terrorism:** It can be considered **the premeditated use of disruptive activities** (against computers and/or networks), with the intention to cause harm or further social, ideological, religious, political or similar objectives.
  - o **Cyber fraud:** Cyber attacks that are generally aimed at getting monetary or related gains for the perpetrators.
  - o **Cyber spying**: Cyber attacks aimed at gaining information for the perpetrators.
  - o **Cyber stalking or bullying:** Cyber attacks which are designed to frightened and intimidate individuals rather than business or Government.

Vulnerability of India to Cyber Attacks and its Cyber Security Challenges:

- **How vulnerable India is to cyberattacks?**
  - o **The cyber security threats emanate** from a wide variety of sources and manifest themselves in disruptive activities that target individuals, businesses, national infrastructure and Governments alike.
  - o **In 2023, India** recorded 2,138 weekly cyberattacks per organization, a 15% increase from 2022.
  - o This makes India the **second most targeted nation in the Asia Pacific region**, after Taiwan.
- **Cyber security challenges:**
  - o **Lack of adequate human resource**, infrastructure, R&D and budgetary allocations to tackle the cyber threats.
  - o Threat emerging from servers hosted outside India.
  - o Challenge posed by imported electronics/IT products.
  - o Upcoming technology viz. Cloud computing, Big data, Internet of Things(IoT), etc.
  - o **Balance between Cyber Security and Right to Privacy, etc.**

Cyber Security Measures Taken by the Indian Government:

- **The Indian Computer Emergency Response Team (CERT-In):** It acts as the central agency for incident response, vulnerability handling, and security management in India's cyberspace.
- **Cyber Surakshit Bharat:** It was launched by the MeitY with National Electronic Governance Division (NeGD) **to ensure more awareness** about the latest cybercrimes and the cybersecurity challenges of India.
- **Cyber Swachhta Kendra:** It provides free tools for malware analysis and helps improve the security of systems and devices.
- **National Cybersecurity Policy 2013:** It provides a framework for creating a secure cyber ecosystem and aims to protect information and other critical infrastructure.

- **NCIIPC:** The National Critical Information Infrastructure Protection Centre (NCIIPC) was established for the **protection of critical information infrastructure** in the country.
- **Indian Cyber Crime Coordination Centre (I4C):** The Central Government has rolled out a scheme for establishment of I4C to handle issues related to cybercrime in the country in a comprehensive and coordinated manner.

India's First Joint Doctrine for Cyberspace Operations:
- **Background:**
  - **China** has built major capabilities in the cyberwarfare domain, including cyberweapons to degrade or destroy an adversary's military assets and strategic networks.
  - **India has been lagging far behind in this arena**, with the government only approving the creation of only a small **tri-service Defence Cyber Agency in 2019** instead of the full-fledged Cyber Command that the armed forces wanted.
- **Formulation of a new joint doctrine for cyberspace operations**:
  - The doctrine comes at a time when the Army is operationalising dedicated specialised units in each of its six operational or regional commands to handle the cyberspace domain.
  - The doctrine will **guide tri-services in planning and conducting cyberspace operations** in the current complex military operating environment.
  - It will give impetus to the **ongoing process of integration** being actively pursued by the Army, IAF and Navy.
- **Significance of the doctrine:** This doctrine –
  - Lays emphasis on understanding military aspects of cyberspace operations,
  - Provides conceptual guidance to commanders, staff and practitioners in the planning, and conduct of operations in cyberspace, and
  - Raise awareness of the Indian war fighters at all levels.

8. India Growth Story Has a Beneficial Ownership Hurdle

Context
- **India's ambition to achieve a $5 trillion economy** by the end of the financial year 2025-26 **heavily relies on foreign investments.**
- However, **attracting foreign investments necessitates the removal of significant bottlenecks** facing Indian companies and foreign investors.
- **The Indian Foreign Exchange Management (Non-debt Instruments) Rules, 2019 (FEMA NDI) while intended to protect Indian companies** during the COVID-19 pandemic, **has introduced considerable challenges that needs to be addressed to develop a conducive environment** for foreign investment.

The Indian Foreign Exchange Management (Non-debt Instruments) Amendment Rules, 2020
- This amendment stipulates that any investments in Indian companies, whether direct or indirect, originating from entities located in countries that share land borders with India, or where the "beneficial owner" of the said **Indian investment is situated in, or is a citizen of any of these Neighbouring Countries would necessitate prior government approval ("PN3 Requirement").**
- The amendment to the 2019 Rules (FEMA NDI) **has posed a significant challenge for Indian companies, especially start-ups and smaller enterprises** seeking foreign investments.

Amendment Conundrum: Challenges and Complexities Due to the Amendment

- **Intent and Implications of the Amendment**
  - The **PN3 Requirement mandates prior government approval for any foreign investments originating from countries that share land borders with India,** or where the beneficial owner of the investment is situated in these neighbouring countries.
  - This **stipulation emerged as a protective measure against hostile takeovers** during a period of unprecedented economic instability.
  - The **rationale was to safeguard strategic assets** and businesses from being acquired at undervalued prices by entities from neighbouring countries, potentially capitalizing on India's temporary economic downturn.
  - However, **the amendment's implementation has led to considerable uncertainty** due to the **lack of a clear definition for the term 'beneficial owner'**.
  - This term is crucial as it determines the necessity of obtaining prior government approval.
  - **Various Indian laws provide context-specific definitions of beneficial ownership, but none are universally applicable to the PN3 Requirement**, causing interpretative inconsistencies.
- **Initial Industry Response**
  - **When the PN3 Requirement was first introduced**, the **industry generally adopted a lenient view.**
  - **Companies and legal advisors relied on beneficial ownership thresholds defined in other laws,** such as the Companies Act, 2013, and the Prevention of Money Laundering Act, 2002.
  - These thresholds often varied between 10% and 25%, and the industry used these figures to guide compliance efforts.
  - However, **the regulatory landscape began to shift in the latter half of 2023.**
  - **The Reserve Bank of India (RBI),** responsible for overseeing compliance with FEMA NDI, **adopted a more conservative interpretation of the law.**
  - This **shift was particularly evident in the RBI's scrutiny of Foreign Owned or Controlled Companies (FOCCs)** and their downstream investments.
  - **Many FOCCs received notices from the RBI questioning their compliance**, leading to a re-evaluation of industry practices.
- **Subsequent Regulatory Stance and its Effect**
  - **The RBI's conservative stance suggested that FOCCs might be subject to the same restrictions as non-resident entities** regarding aspects of the law that were previously ambiguous.
  - This **interpretation prompted investors to reassess their strategies and caused legal firms to advise clients** against relying on beneficial ownership thresholds from other laws.
  - This **shift in regulatory interpretation created a ripple effect of uncertainty and cautiousness among foreign investors** and Indian companies alike.
- **Challenges in Compliance and Approval Process**
  - **The requirement for prior government approval**, as stipulated by the PN3 Requirement, **poses significant challenges.**
  - The **approval process is not only time-consuming but also marked by a high rejection rate.**
  - Although consolidated official data on pending or rejected applications is not publicly available, statements from government officials indicate a substantial backlog.
  - **Proposals worth ₹50,000 crore are either pending, withdrawn, or rejected**, and 201 applications have been turned down in the past three years.
  - **This complex approval process creates a bottleneck for companies seeking foreign investment.**

- o **The uncertainty and delays associated with obtaining approval can deter potential investors**, particularly those looking to invest in fast-growing start-ups and smaller enterprises that need timely capital infusions to sustain their growth trajectories.
- **Legal and Financial Uncertainties**
  - o **The PN3 Requirement places the onus of compliance squarely on the Indian companies** receiving foreign investments.
  - o The **regulatory authorities have the discretion to impose severe penalties** for non-compliance, including fines of up to three times the investment received.
  - o **This stringent penalty structure, combined with the inherent vagueness of the legislation, can create significant legal and financial risks** for companies.
  - o **Many start-ups**, which often operate with investments far exceeding their current revenues or assets, **face the risk of insolvency if subjected to such fines.**
  - o **Non-compliance could also trigger prolonged legal battles**, adding to India's already substantial backlog of court cases.
  - o **This legal uncertainty further complicates the investment landscape**, making it less attractive for foreign investors.

Proposed Solutions to Address the Challenges
- **Clear Definition of Beneficial Owners**
  - o **Indian companies might consider requiring foreign investors to provide indemnities** ensuring compliance with the PN3 Requirement.
  - o However, **this approach could deter investors due to potential liabilities.**
  - o Therefore, **a more practical solution involves amending the PN3 Requirement to include a comprehensive definition of 'beneficial owners'**, covering ownership thresholds and control tests.
  - o **The definition should specify a clear threshold** for beneficial ownership, ranging from 10% (as per Indian company law) to 25% (as recommended by the Financial Action Task Force).
  - o **This threshold can be adjusted to align with the government's objective** of scrutinising varying levels of foreign investment across different sectors.
  - o **Sensitive sectors like telecom and defence might warrant stricter scrutiny** compared to sectors like manufacturing and construction, which require more foreign capital.
  - o **The definition should also outline control-conferring rights beyond ownership thresholds**, encompassing significant influence indicators such as board meeting quorums or veto powers over operational decisions.
  - o However, **investor value protection rights, like veto powers over mergers or right of first offer, should be excluded** as they do not constitute control.
- **Employment of Time Bound Consultation Mechanism**
  - o **To address lingering ambiguities** even after defining control-conferring rights, **a time-bound consultation mechanism with regulatory authorities could be instituted.**
  - o This **would allow for a determination of whether specific clauses in charter documents confer control**, like mechanisms in Indian competition law.
  - o Such a system would ensure clarity and reduce legal uncertainties.

Conclusion
- **For India to attract the necessary foreign investments** to reach its $5 trillion economy goal, **it is crucial to address the bottlenecks posed by the current regulatory framework.**

- **Amendments to the PN3 Requirement**, specifically defining beneficial ownership and establishing a clear consultation mechanism, **will provide clarity and confidence** to foreign investors.
- **By refining these regulations, India can create a more favourable investment climate, encouraging the influx of foreign capital** essential for its economic growth and development.

9. Heatwaves have not been included as a notified disaster

Why in news? The current extreme heatwave across the country has reignited discussions about including heatwaves as a notified disaster under the Disaster Management (DM) Act, 2005. If this inclusion occurs, states will be able to use disaster response funds to provide compensation, relief, and manage the effects of heatwaves. At present, states must use their own funds for these activities.

Disaster Management (DM) Act, 2005
- **About**
  - It is a comprehensive legal framework to establish and manage disaster management policies and procedures by defining roles and responsibilities at the national, state, and district levels.

- **Key features**
  - **Establishment of the National Disaster Management Authority (NDMA)**
    - Chaired by the Prime Minister.
    - Responsible for laying down policies, plans, and guidelines for disaster management.
  - **State and District Disaster Management Authorities**
    - States - Chaired by the Chief Minister, responsible for implementing national policies and plans.
    - Districts - Chaired by the District Magistrate, responsible for disaster management at the district level.
  - **National Executive Committee (NEC)**
    - Comprises secretaries of various ministries.
    - Assists the NDMA in performing its functions and coordinates disaster response and relief measures.
  - **National Plan and State Plans**
    - The act mandates the preparation of a National Plan for disaster management by the NDMA and State Plans by State Disaster Management Authorities.
  - **Disaster Response and Mitigation Funds**
    - Establishment of the National Disaster Response Fund (NDRF) and State Disaster Response Fund (SDRF) for immediate relief and response efforts.
    - National Disaster Mitigation Fund and State Disaster Mitigation Funds for long-term disaster risk reduction and mitigation.
  - **Community Participation**
    - Encourages community-based disaster management and awareness programs.
    - Involvement of local bodies and communities in disaster preparedness and response activities.

What are notified disasters?
- **About**
  - Notified disasters are **specific types of disasters that have been officially recognized and listed by the government for special consideration and management under the DM Act, 2005.**
  - These disasters are formally acknowledged to ensure systematic and structured response and relief efforts, often involving the allocation of dedicated funds and resources.

- **Categories of notified disasters under DM Act 2005**
  - o The Act includes 12 categories of notified disasters, which are**: Cyclone, Drought, Earthquake, Fire, Flood, Tsunami, Hailstorm, Landslide, Avalanche, Cloudburst, Pest attack, Frost and cold waves**
  - o **These are eligible for relief assistance under the SDRF and NDRF.**
    - ▪ The states first utilise the funds available in the SDRF, and only if the magnitude of the disaster is unmanageable with the SDRF, states seek the money from the NDRF.
    - ▪ While the entire money of the NDRF comes from the central government, states contribute 25% of the money in the SDRF (10% in case of special category states), the rest comes from the Centre.

Heatwaves - not included as notified disasters
- **Heatwaves - a common occurrence during summer**
  - o Though heatwaves are not a new phenomenon in India, these were **not viewed as a disaster when the Act came into being in 2005.**
  - o It was because **heatwaves were a common occurrence during summer**, and not really an unusual weather event.
- **Increasing demand for including heatwaves as notified disaster**
  - o Over the years, both the severity and frequency of heatwaves have increased.
    - ▪ Due to increased economic activity, there is a far larger number of people who have to remain outdoors for their livelihoods or other reasons, exposing them to the risk of a heat-stroke.
  - o **23 states are vulnerable to heatwaves**. These states as well as several vulnerable cities have now prepared heat action plans (HAPs) to deal with the impacts of extreme heat.
    - ▪ HAPs involve activities like crea**tion of shaded spaces, ensuring availability of cool water in public places, distribution of simple oral solutions, and reorganising the schedules of schools, colleges and office working hours.**
  - o These measures require expenditure but state governments have not been able to use the SDRF for them. This is the reason for the demand for inclusion of heatwaves as a notified disaster in the DM Act.

Why is the Centre not adding heatwaves as a notified disaster now?
- **Reluctance of Finance Commission**
  - o The 15th Finance Commission, whose recommendations are currently in effect, stated that the **existing list of notified disasters already largely meets the needs of the states and did not support including heatwaves.**
  - o Nevertheless, it endorsed an enabling provision created by the previous Commission that allows states to use up to 10% of their SDRF for local disasters such as lightning or heatwaves, which states can notify themselves.
    - ▪ Using this provision, **at least four states — Haryana, Uttar Pradesh, Odisha, and Kerala** — have classified heatwaves as local disasters.

- **Practical Difficulties**
  - o The main reason behind the reluctance to add heatwaves as a notified disaster is **the significant financial implications.**
    - ▪ The government would have to provide Rs 4 lakh compensation for every life lost due to a notified disaster, along with compensation for grievous injuries.
    - ▪ **Heatwaves claim many lives annually, and the recorded number of deaths has been increasing, with over 500 heat-related deaths reported this year.**

- Mandating compensation could reveal even more deaths.
  o Additionally, attributing deaths to heatwaves is challenging because most deaths are due to pre-existing conditions exacerbated by extreme heat, making it hard to ascertain the direct impact of heat.
    - This differs from other disasters where victim identification is straightforward.
- **Fund allocated by Finance commission and associated challenges**
  o 15th Finance Commission recommended allocating Rs 1,60,153 crore to various State Disaster Response Funds (SDRFs) for 2021-26.
  o States like Uttar Pradesh received about Rs 11,400 crore, while Maharashtra received the maximum, about Rs 19,000 crore.
  o This **money is intended for all types of disasters during this period.**
  o There is a concern that these funds could become insufficient if heatwaves and lightning are added to the list of notified disasters.

10. Is Redistribution a Tool for Lowering Inequality

Why in News? According to the Researchers from the Paris School of Economics, inequality in modern India surpassed that of colonial periods. In this context, the article tries to analyse the concept of inequality and how redistribution policies can be used to reduce it.

Argument For and Against Inequality:
- According to some researchers, **some form of inequality is actually beneficial**, since it encourages entrepreneurs to launch businesses, boosting employment and well-being for others.
- However, for some researchers, inequality **can only have deleterious economic-political effects**.
  o **For example,** inequality harms democratic processes and results in the concentration of monopoly power amongst capitalists relative to labour.
  o This can have negative effects on consumption, welfare, and growth.
  o To deal with the situation, they suggest wealth taxes and distribution policies can be a good option.

Business Monopoly and Inequality:
- Because they are the dominant players in their specific market, **monopolies allow enterprises to set their own pricing for their goods instead of being determined by the market.**
- This may lead to the phenomenon known as "**greedflation**," which refers to businesses boosting prices to boost profit margins.
- Thus, the presence of monopolies **can lead to lower real wages**, resulting in the rise of economic inequality in the society.

How Business Monopoly Leads to Inequality?
- **Condition favourable for workers - Role of 'multiplier' effect:**
  o When a company decides to set up a new factory, wages are paid out to workers to build it.
  o This income of the workers is spent on purchasing goods, which increases the income of goods-sellers and whose increased income results in purchases of other goods.
  o **Thus, the total increase in the income of workers and goods-sellers is greater than the initial investment.**

- This process is called the 'multiplier' effect, **wherein investment raises incomes by a greater proportion than the initial investment.**
- **Companies exercise monopoly:**
  - Real wages of workers are lower and they can only purchase lesser items.
  - However, companies will enjoy the same amount of profits from the sale of a lesser amount of goods (because of higher margins).
  - **The increase in income from a given amount of investment will be lesser under monopoly because of reduced consumption power.**
  - Thus, investment will have a weaker effect on growth under monopoly (while the profits earned by the companies remain the same).
- **Can the consumption of the rich help boost growth?**
  - Wealthy people consume more in total, but they consume a lesser percentage of their income.
  - As a result, an unequal economy will give people who are more likely to consume less income, which will hinder economic growth.

Could Redistribution of Wealth Help Reduce Inequality?

- **No:**
  - Investment occurs under the influence of future profit expectations, while wealth is accumulated past profits.
  - A high tax regime would deter entrepreneurs from accumulating wealth, which would diminish investment and employment.
- **Yes:**
  - Taxing billionaires and providing basic income to the poor might cause some to exit the economy, but can create a new class of entrepreneurs and boost start-ups.
  - If monopolies are curtailed, then prices would be lower and real wages higher, leading to greater demand.
- **Conclusion:**
  - Redistribution is not a silver bullet, and an economy may suffer from having excessively high tax rates.
  - Thus, if redistribution is combined with other policy measures, inequality can be reduced.

PRELIMS BOOSTER- THE HINDU & INDIAN EXPRESS

3RD JUNE

1. Special Non-Resident Rupee (SNRR) and Special Rupee Vostro Account (SRVA):

SNRR Account:
- Any person resident outside India, having a business interest in India, can **open SNRR account for purpose of putting through bona fide transactions in rupees.**
- SNRR accounts are usually allowed for specified transactions in **trade, foreign investments, ExternalCommercial Borrowings etc.**

SRVA Account:
- Vostro account is an account that **domestic banks hold for foreign banks in former's domesticcurrency (in this case, rupee).**
- SRVA is an additional arrangement to existing system that uses freely convertible currencies and worksas a complimentary system.
- For opening **SRVA, prior approval of RBI is required**.

2. Living Will: High Court judge becomes first in Goa to register a 'living will'.

About Living Will (Advance Medical Directive):
- Refers to a **written document that a person uses to give his explicit instructions in advance about medical treatment to be administered if he becomes incompetent or unable to communicate.**
- It is executed voluntarily.
- Supreme Court in **Common Cause vs. Union of India & Anr. (2018) cas**e, held that a person in persistent vegetative state can opt for **passive euthanasia (withdrawing life support, medical treatment).**
- A person can execute a living will to refuse medical treatment in case of a terminal illness.

3. Variable Repo Rate (VRR): The recent VRR auction by Reserve Bank of India (RBI) witnessed agood response from banks.

About VRR:
- Rate at **which RBI allows Banks to borrow at a rate decided by the market.**
- Repo Rate is the **rate at which Banks borrow money from RBI which is fixed by RBI.**
- The borrowing duration is more than **One Day and usually up to 14 days**.
- It is a **tool to inject short-term liquidity** into the banking system.
- Similarly Variable Rate Reverse Repo (VRRR) is conducted to absorb the excess liquidity from thesystem.

4. Funan Techno Canal: Recently, Cambodia announced that it will start work on Funan Techo canalsoon.

About Funan Techo Canal:
- It is a **proposed 180-kilometer canal project in Cambodia funded by China.**
- It will **connect Cambodian coastal province of Kep (on Gulf of Thailand) with capital Phnom Penh via Bassac River (Hau Giang River),** one of the major tributaries of Mekong River.
- It will reduce Cambodia's reliance on Vietnamese ports for international shipping.

4TH JUNE

1. Cellulose decomposition: A study found that agriculture and urbanization are accelerating the decomposition of plant litter in rivers and streams. Plant litter are primarily cellulose.

Cellulose:
- Cellulose is a **polymeric polysaccharide made of glucose and is the primary structural componentof plant cell walls.**
- It is the most abundant Extracellular structural polysaccharide Biomolecule in the biosphere.

- Cellulose decomposition Cellulase enzymes hydrolyze cellulose into glucose, a sugar that can be fermented to ethanol or could also undergo cellular respiration to yield CO2 and water.
- Thus, cattle and termites can digest cellulose as their gut harbours Cellulase-producing bacteria.
- However, Cellulose cannot be digested by humans as their **gut lacks cellulase enzyme**.

2. Tmesipteris oblanceolata: News research shows that Tmesipteris oblanceolata, a species of fork fern, has largest genome. **Genome is the complete set of genetic information in an organism**.

 About Tmesipteris oblanceolata:
- Contains 160 billion base pairs (the units that make up a strand of DNA) outstripping the humangenome by more than 50 times.
- It **belongs to a primordial group of plants** that evolved long before dinosaurs set foot on the earth.
- Found only in **New Caledonia and a few nearby islands in the Pacific Ocean** and thrives on the trunks and branches of trees in rainforests.

3. Biocover: A recent study has proposed a sustainable approach of microbial methane oxidation system (called as biocover) to control fugitive methane emissions from old dumpsites.
 About Biocover:
- Biocovers are **porous material layer laid directly on top of a landfill which is then covered by an oxidizing layer of mature compost.**
- It provides optimal conditions for **methanotrophic (methane utilizing) bacteria to thrive and act as biofilters**, hence control methane emissions by converting methane to CO2.
- **Potential applications:** Road construction, land reclamation, etc.
- **Concerns:** As they are found in old and deep dumpsites, they may be contaminated with heavy metalsand microplastics.

5TH JUNE

1. World Summit on the Information Society (WSIS): India participates in International Telecommunication Union's (ITU) WSIS+20 Forum High-Level Event 2024 in Geneva, Switzerland. WSIS+20 Forum marks 20 years of progress made in implementation of outcomes of WSIS, which took place in two phases in Geneva (2003) and Tunis (2005).

About WSIS:
- **WSIS forum is co-organised annually by ITU, UNESCO, UNDP and UNCTAD** and co-hosted by ITU and Swiss Confederation.
- **Aim:** Create multi- stakeholder platform to address issues raised by information and communication technologies through inclusive approach at national, regional and international levels.
- **Goal: To build a people-centric, inclusive and development oriented Information Society,** enabling universal access, utilization, and sharing of information.

2. PraVaHa Software: ISRO develops PraVaHa (Parallel RANS Solver for Aerospace Vehicle Aero-thermo-dynamic Analysis) software.

About PraVaHa:
- **Computational Fluid Dynamics (CFD) software**.
- Can simulate external and internal flows on launch vehicles, winged and non-winged re-entry vehicles.
- Developed in ISRO's Vikram Sarabhai Space Centre (VSSC).

Vikram Sarabhai Space Centre (VSSC):
- Responsible for the **design and development of launch vehicle technology**.
- Major programme **includes Polar Satellite Launch Vehicle (PSLV), Geosynchronous**

Satellite Launch Vehicle (GSLV), GSLV Mk Ill etc.

- **HQ: Thiruvananthapuram, Kerala**

3. Greedflation: As per experts, the phenomenon of greedflation is contributing to high rates of inflation in the Western Countries.

About Greedflation:
- **Greedflation means corporate greed is fuelling inflation.**
- Instead of the wage-price spiral, it is the **profit-price spiral that fuels inflation.**
- A **wage-price spiral is an economic situation in which rising wages and rising prices feed into each other in a self reinforcing cycle**.
- It implies that Companies exploit inflation by increasing their prices beyond just covering their increased costs and then use that to maximize their profit margins which further fuelled inflation.

4. Global Soil Partnership (GSP): GSP Assembly calls for urgent action to improve and maintain health of at least 50 percent of world's soils by 2030 at Twelfth Plenary session (hosted by FAO).

About Global Soil Partnership:
- It was **established in 2012 by Food and Agriculture Organization (FAO)** as a mechanism to develop a strong interactive partnership and enhanced collaboration and synergy of efforts between all stakeholders.
- It **aims to position soils on Global Agenda, promote inclusive policies and soil governance as well as sustainable soil management.**

7TH JUNE

1. Applications of Nanoparticles
- **Medical:** Targeted drug delivery, gene therapy, tissue engineering etc.

- **Industrial:** Ability to induce unique electrical, mechanical properties and create stronger, lighter, cleaner surfaces.
- **Food processing**: Placing anti-microbial agents and increase/ decrease gas permeability in food packaging.
- **Environmental:** Air purification with ions, waste water purification with nanobubbles or nanofiltration systems for heavy metals.
- **Electronics:** Printed electronics, including Carbon Nanotubes, etc.

2. Parole: Karnataka High Court ordered the release of a convict on parole under extraordinary circumstances.

About Parole:
- **Parole means temporary release of a convict for short period of time for attending to familial and social obligations (like death in family).**
- It is not a matter of right. It is **covered under Prisons Act of 1894 and Prisoner Act, 1900.**
- Since Prisons is a State subject, **Prisons Act of each state government defines rules under which parole is granted in that state.**
- Prisoners convicted of multiple murders or under anti-terror Unlawful Activities Prevention Act are not eligible for parole

3. Pump and Dump Scheme: Recently SEBI imposed a fine on some individuals for allegedly operating a 'pump and dump' scheme. It was **operated by recommendations shared through Telegram channels, resulting in public shareholders purchasing stock at inflated prices**.

About Pump and Dump Scheme:
- A manipulation activity involving artificially inflating a stock's price through false and misleading information/recommendations.
- It is **done only to sell stock at an inflated price.**

- **Prevalent in micro-cap and small-cap sectors** due to limited public information and lower trading volumes.
- **Impact:** Undermine confidence in financial markets, and substantial losses to investors.
- **Regulation:** Under SEBI's guidelines, it is completely banned

4. Environmental Performance Index (EPI), 2024: Recently, EPI 2024 has been published by Yale Center for Environmental Law & Policy.

About EPI, 2024:
- Using **58 performance indicators across 11 issue categories, EPI ranks 180 countries on climate change performance, environmental health, and ecosystem vitality.**
- Estonia tops the list.

India-related Findings:
- **India has been ranked 176.**
- **India is currently world's third-largest GHG emitter**, with total emissions growing 32 percent over past decade.
- In 2022, **India surpassed China as the world's largest emitter of anthropogenic sulfur dioxide.**

8 JUNE

1. Cotton Corporation of India (CCI): CCI plans to open depots in Coimbatore (Tamil Nadu).

About CCI:
- **Genesis:** Established as a PSU under the Companies Act, 1956 in 1970.
- **Ministry:** It is under the administrative control of Ministry of Textiles.
- **Headquarters:** Navi Mumbai.

Functions:
- Undertakes price support operations, whenever **market prices of kapas (seed cotton) fall below minimum support prices, without any quantitative limit.**
- Undertakes commercial purchase operations to fulfill raw material requirement of domestic textile industry.
- **Operations:** Cover all cotton growing states in northern (Punjab, Haryana, Rajasthan), central (Gujarat, Maharashtra, Madhya Pradesh, Orissa), and southern zones (Andhra Pradesh, Telangana, Karnataka, Tamil Nadu).

2. Milgromian Dynamics (MOND): Studies conducted by the Cassini-Huygens Mission challenged MOND theory. **Cassini is a joint endeavour of NASA, European Space Agency, and the Italian Space Agency to study Saturn and its complex system of rings and moons.**

About MOND:
- It is an alternative paradigm of dynamics, proposed by **Mordehai Milgrom**, seeking to replace Newtonian dynamics and General Relativity.
- It **aims to account for the ubiquitous mass discrepancies in the Universe**, without invoking the dark matter that is required if one adheres to standard dynamics.

3. Applicability of RTI on MPLAD Scheme: Delhi High Court has observed that Chief Information Commissioner (CIC) has no jurisdiction to comment upon utilization of funds by Members of Parliament (MPs) under MPLAD Scheme.
- Member of Parliament Local Area Development (MPLAD) scheme is a central sector scheme **aimed to enable each Member of Parliament to recommend works of developmental nature based on the locally felt needs of the people.**
- **Applicability of RTI on MPLAD Scheme:** Any citizen can seek information on any aspect of the scheme and work recommended by MPs, sanctioned or executed under it.
- Implementing District Authorities are responsible to provide such information.

4. 'Air of the Anthropocene (AoA)' project: Researchers and artists have joined the 'Paint with

Light' initiative as a part of the AoA project.

'AoA' project:

- Created by artist Robin Price and an environmental scientist at the University of Birmingham to document air pollution levels around the world through photography.
- **'Paint with light' involved combining digital light painting and low-cost air pollution sensors**, to produce photographic evidence of air pollution in cities of India, Ethiopia and the UK.
- It has also been used **to raise air pollution awareness by UN.**

9 JUNE

1. Insolvency and Bankruptcy Board of India (IBBI): IBBI issues new guidelines to streamline the process of appointing Insolvency Professionals (IPs) as resolution professionals.

About IBBI:

- Statutory body under the Insolvency and Bankruptcy Code, 2016
- **Headquarters:** New Delhi
- **Ministry:** Ministry of Corporate Affairs

Functions:

- It has regulatory oversight over the service providers in the insolvency ecosystem.
- It has **responsibility to provide a regulatory framework for insolvency and resolution processes of corporates and individuals.**
- Functioning of the IBBI are governed by a Governing Board constituted by the Central Government

2. Common Service Centres (CSCs): An MoU was signed between CSC Special Purpose Vehicle (SPV) and Ministry of Agriculture & Farmer's Welfare to convert 10,000 Farmer Producer Organizations (FPOs) into CSCs. **FPO is a type of Producer Organisation (legal entity formed by primary producers) where the members are farmers.**

About CSC:

- CSCs provide **citizen access to Government-to-Citizen e-services by creating physical service delivery ICT** (Information and Communication Technology) infrastructure.
- Initially part of **National e-Governance Plan, CSC 2.0 is being implemented under Digital IndiaMission.**
- Presently, there are 5.43 lakh functional CSCs.
- **Nodal Ministry:** Ministry of Electronics and Information Technology

3. Liquid Nitrogen: Food Safety and Standards Authority of India (FSSAI) has issued advisory on unauthorized use of liquid nitrogen in food by food serving establishments.

About Liquid Nitrogen:

- Nitrogen is **colourless, odourless gas or liquid (cooled to liquid at very low temperature).**
- It has **functional use as 'freezing agent,** propellant, packaging gas & foaming agent'.
- As per Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011, **nitrogen is a Good Manufacturing Practice (GMP) additive.**
- It is allowed in dairy-based ice cream desserts at GMP levels solely for contact-freezing and coolingpurposes.
- **Health Effects:** Frostbite, burns, asphyxiation and damage to internal organs.

4. White Phosphorous: Israel is accused of using white phosphorus munitions in southern Lebanon.

White Phosphorous:

- It is a **toxic substance produced from phosphate-containing rocks.**
- Reacts and burns in air at temperatures above 30 °C until deprived of oxygen

Uses:

- **Military:** In ammunition, to produce smoke for concealing troop movements and identifying targets.
- **Industrial:** To manufacture chemicals used in **fertilizers, food additives, and cleaning compounds.**

- It is not considered a chemical weapon under the Chemical Weapons Convention (CWC).

10 JUNE

1. Avian influenza A (H5N2): First human infection with avian influenza A (H5N2) virus found in Mexico. Depending on the original host, influenza A viruses can be classified as avian influenza, swine influenza, or other types of animal influenza viruses**. Avian influenza or Bird flu is a viral infection that primarily affects birds. Certain subtypes of the virus can infect humans, leading to severe respiratory illnesses like H5N1.**

Symptoms: Fever, cough, sore throat, muscle aches, and severe respiratory distress in advanced cases.

2. Antlions: Researchers have found two antlion species for first time in India, Thailand and Vietnam. They are **Pseudoformicaleo nubecula and Creoleon cinnamomeus** and were found in Kerala.

About Antlion:
- Belong to family of insects.
- **Comparison with damselflies:** Although both have morphological resemblance, antlions are distinguished by their long, distinct antennae.
- **Behaviour:** Known by their pit-building habit as part of their predation strategy.
- **Ecological Significance:** Being carnivorous, they serve as biological agents to destroy the harmful pests.

3. Subansiri River: An Agreement has been signed for the implementation of a comprehensive Fisheries Management Plan at Subansiri Lower Hydro Electric Project (SLHEP). SLHEP is an under construction gravity dam on the Subansiri River. Gravity dam is a concrete or masonry dam so proportioned that it will resist overturning and sliding forces by its own weight.

About Subansiri River (Gold River):
- Rises from the Kangig glacier range in Tibet. It is a **trans-Himalayan river.**
- In India, it enters in the state of Arunachal Pradesh.
- Right bank tributary of **Brahmaputra River, joins it, in the plains of Assam.**
- **Major tributaries:** Laro, Nye, Yume, Tsari, Kamla, etc.

4. Large Action Models (LAMs): Enterprises globally are adopting LAMs to cut their labour cost.

About LAMs:
- An artificial intelligence model that can understand and execute complex tasks by translating human intentions into action.
- LAMs go beyond generating and interpreting text like ChatGPT.
- **Working of LAMs:** At its core, LAM utilizes a hierarchical approach to action representation and execution.
- It breaks down complex actions into smaller sub-actions, allowing for efficient planning and execution.
- **Applications:** Job application automation, investment portfolio optimisation, personalised social media content creation, etc.

11 JUNE

1. Sticky Inflation: RBI in its recent monetary policy review decided to retain the repo rate, for eighth time in a row, due to concerns of sticky inflation.

About Sticky Inflation:
- It **refers to a phenomenon where prices do not adjust quickly to changes in supply and demand, leading to persistent inflation.**
- **Rising wages and prices for consumer goods and services** are typically the main factors behind inflation stickiness.
- It can push monetary authorities to tighten monetary policy and raise interest rates.

2. National Health Claim Exchange (NHCX): Union Health Ministry along with Insurance Regulatory and Development Authority of India (IRDAI) will launch NHCX to allow patients to access quality healthcare with reduced out-of-

pocket expenditure.

About NHCX:

- It will serve as a protocol for exchanging claims-related information among various actors, including payers, providers, beneficiaries, regulators, and observers.
- It is **designed to be an interoperable, machine-readable, auditable, and verifiable** to ensure that the information being exchanged is accurate and trustworthy.
- It is an **open standard based communication.**

3. Face Recognition Technology (FRT): Adoption of Facial Authentication Technology (FAT) based Digital Life Certificate (DLC) in 2022-23 by the Employees' Provident Fund Organisation (EPFO) has eased the life pensioners. FAT is based on Face Recognition Technology (FRT).

About FRT:

- **Facial recognition is a category of biometric security**.
- Other forms of biometric security include **voice recognition, fingerprint recognition, and eye retina oriris recognition.**
- It can identify human faces in images or videos or search for a face among a large collection of existing images.
- **Significance:** Used in automatic image indexing, video surveillance systems for personal security, etc.

4. East Asia Summit:

- **Established:** In 2005 at Kuala Lumpur (Malaysia).
- It is **Leaders-led forum for dialogue and cooperation on broad strategic, political, and economic** issues of common interest and concern with aim of promoting peace, stability, and economic prosperity in East Asia.
- **Membership: 18 Members,** including 10 ASEAN members and Australia, China, Japan, India, New Zealand, Republic of Korea, Russia, and US.
- **6 priority areas of cooperation:** Environment

and energy, Education, Finance, Global health issues and pandemic diseases, Natural disaster management, and ASEAN Connectivity

12 JUNE

1. Lagrange point (L1):

- At Lagrange points, **gravitational pull of two large masses (like Sun and Earth)** precisely equals centripetal force required for a small object to move with them.
- L1 has advantage of continuously viewing Sun without any occultation/ eclipses.
- There are five Lagrange points, three are **unstable (L1, L2, L3- lie along the line connecting two large masses) and two are stable (L4, L5).**

2. PM KISAN:

- **Nodal Ministry:** Ministry of Agriculture & Farmers Welfare.
- **Type:** Central Sector Scheme.
- **Aim:** To supplement financial needs of land-holding farmers families in procuring various inputs and also domestic needs.
- **Objective:** To provide income support to all land-holding eligible farmer families (families include husband, wife and minor children).
- **Beneficiaries:** All landholding farmers, subject to certain exclusions.
- **Benefits:** Rs. 6,000 is transferred annually in three equal instalments of Rs. 2,000 each every four months.
- **Exclusion:** Beneficiaries of higher economic status shall not be eligible.

3. Microalgae: CSIR-IICT scientists highlighted microalgae potential as a protein supplement.

About Microalgae:

- Diverse group of single-cell photosynthetic organisms, both **prokaryotes and eukaryotes**.
- These are groups of autotrophic microorganisms that live in marine, freshwater, and soil ecosystems.

Significance:

- **Nutrition:** These are rich in nutrients and biologically active substances, such as proteins, vitamins, etc.
- **Carbon cycle:** They absorb carbon dioxide and produce oxygen through photosynthesis.
- **Food Chain:** Phytoplankton, which forms the base of the food chain, includes microalgae.

4. Xylitol: Recent study has found out that Artificial sweetener xylitol may pose health risks. According to study, it can increase risk of cardiovascular events, including heart attacks and strokes.

About Xylitol:

- It is a **sugar alcohol that is commonly used as a sweetener**.
- Sugar alcohols combine traits of sugar molecules and alcohol molecules.
- It is a common ingredient in **sugar-free chewing gums, diabetes friendly foods and oral-careproducts.**
- It can be **found naturally or artificially produced, primarily from plant materials**

13 JUNE

1. Notified Disasters: Heatwave events have reopened discussions on inclusion of heatwave as notified disasters under the Disaster Management (DM) Act, 2005.

About Notified Disasters:

- DM Act 2005 provides for **allocation and utilization of resources from the National Disaster Response Fund (NDRF) and State Disaster Response Fund (SDRF).**
- Money in these funds can be utilized only for response and management of notified disasters.
- Presently, there are **12 Notified Disasters including Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst, pest attack, frost &**

cold wave.
- In 2020, government treated Covid-19 as notified disaster as a special one-time dispensation.

2. Prevention of Arms Race in Outer Space (PAROS): In a recent joint statement, BRICS Ministers for Foreign Affairs emphasized the need to discuss a legal multilateral instrument on PAROS.

About PAROS Treaty:

- In 2008, draft treaty submitted to the **Conference on Disarmament aims to refrain State Parties from placing objects carrying any type of weapon into orbit**, installing weapons on celestial bodies, and threatening to use force against objects in outer space.
- It would complement and reaffirm the importance of the 1967 Outer Space Treaty

3. Quality Council of India (QCI): Quality Council of India (QCI) celebrates World Accreditation Day, a global initiative to promote the value of accreditation (formal recognition of meeting established quality standards).

About QCI:

- QCI is a **non-profit organization registered under the Societies Registration Act XXI of 1860.**
- It was **established as a National body for Accreditation in 1996.**
- QCI was set up through a Public-Private Partnership (PPP) model as an independent autonomous organization.
- The **Department of Industrial Policy and Promotion designated as the nodal point for all matters connected with quality and QCI.**

4. Multi-Drug Resistant Pathogens: Researchers from IIT Madras and NASA are studying multi-drug resistant (MDR) pathogens, particularly **Enterobacter bugandensis, on the International Space Station (ISS).**
- It is a **prevalent nosocomial (hospital acquired infection) pathogen found on surface within ISS.**
- Enterobacter species are on the WHO priority list for developing new antimicrobials

Multi-Drug Resistant (MDR) Pathogens:

- Pathogens (bacteria, virus, fungi, parasites, etc. that causes disease) that have become resistant to antimicrobial drugs like antibiotics, antifungal etc.
- They occur either naturally through genetic changes or may get accelerated due to the misuse or overuse of antimicrobials.

20 JUNE

1. Second meeting of U.S.-India Initiative on Critical and Emerging Technology (iCET) held in New Delhi:

Significance of ICET:
- Vital for India's growing role as a **trusted supply chain partner and contributor in the global technology value chain.**
- Deals directly with disruptive domains which are central to the next Industrial Revolution and future warfare.
- Open new markets for India's deep technology players.

2. Chief of Defence Staff (CDS):
- **Head of the Department of Military Affairs**, created within Ministry of Defence and function as its Secretary.
- **CDS is Permanent Chairman of Chiefs of Staff Committee**, member of Defence Acquisition Council chaired by Ministry of Defence and Defence Planning Committee chaired by National Security Advisor.
- **CDS acts as Principal Military Adviser** to Ministry of Defence on all tri-services matters of military and Military Adviser to Nuclear Command Authority.
- CDS do not exercise any military command, including over the three Service Chiefs.

3. Light Combat Helicopter (LCH): Ministry of Defence has issued Request for Proposal to Hindustan Aeronautics Limited (HAL) for procurement of 156 LCH.

About LCH: First indigenous Multi-Role Combat Helicopter **designed and manufactured by HAL.**

Capable of firing air-to-ground and air-to-air missiles. Possesses modern stealth characteristics, robust armour protection and formidable night attack capability. Capable of operating from high altitude terrain and carrying out precision strike at high altitude targets areas (like Siachen glacier). **Uses radar-absorbing material to lower radar signature and has a significantly crash-proof structure and landing gear.**

4. Angel Tax:

- It **was first introduced in 2012 under Income-tax Act, 1961.**
- It is levied on the capital raised via the issue of shares by unlisted companies if the share price of issued shares is seen in excess of the fair market value of the company.
- It **helps in curbing money laundering** and make it easier for businesses to comply with the tax norms.

21 JUNE

1. Minimum Support Prices (MSP): Cabinet approved MSP for Kharif Crops.

About MSP

- **MSP is the minimum rate at which farmers sell their crops to the government.** It is aimed at preventing farmers from distress selling.
- **MSP covers 22 crops: 14 Kharif Crops**: Paddy, jowar, bajra, maize, ragi, arhar, soyabean, sunflower, sesamum, nigerseed, cotton, etc.
- **6 Rabi Crops:** Wheat, barley, gram, masur (lentil), rapeseed/ mustard and safflower.
- **2 Commercial Crops:** Jute and copra Announced at the beginning of the sowing season.
- Commission for Agricultural Costs and Prices (CACP) recommends MSP. Cabinet Committee on Economic Affairs chaired by Prime Minister takes the final decision. **Food Corporation of India is the nodal Central procuring agency for wheat and paddy**

2. MAVEN orbiter: NASA's Mars Atmosphere and Volatile Evolutionm (MAVEN) orbiter

captured stellar display of purple-coloured lights on the Mars planet. **Launched in 2013, MAVEN is the first mission devoted to understanding the Martian upper atmosphere.** It was envisaged to explore how the sun may have stripped Mars of most of its atmosphere, making it a cold and barren desert from potentially habitable to microbial life.

3. Purpurogallin: **These are phenolic pigments**. Acts like sunscreen and protects algal cells from damage of ultraviolet (UV) and visible light. Also linked with tolerance of low temperatures and desiccation. **Possesses antioxidant, anticancer, and anti-inflammatory effects.**

4. National Forensic Infrastructure Enhancement Scheme: Union Cabinet has approved a new central sector scheme (CSS) National Forensic Infrastructure Enhancement Scheme (NFIES).

About NFIES: Aims to ease the workload on forensic laboratories in line with requirements of reformed criminal laws that will come into force w.e.f. July 01, 2024. New criminal laws mandate forensic investigation for offences involving punishment of 7 years or more. Provisioned under Union Ministry of Home Affairs from 2024-25 to 2028-29.

Components:
- Establishment of Campuses of National Forensic Sciences University (NFSU).
- Establishment of Central Forensic Science Laboratories.
- Enhancement of existing infrastructure of NFSU-Delhi.

24 JUNE

1. Mirage 2000:

Manufacturer: Dassault Aviation, France. It is a single engine delta-wing multirole aircraft. **It is supersonic combat aircraft with maximum speed of Mach 2.2.** Mirage 2000 can carry laser guided bombs, air-to-air and air-to surface missiles and has a Thomson-CSF RDY (Radar Doppler Multi target) radar on board. **First commissioned in Indian Air Force in 1985 which gave it the name 'Vajra'.** It played a decisive role in 1999 Kargil war and operation Bandar of 2019.

2. Gas Flaring: Global Gas Flaring Tracker Report has been released by the World Bank. Report is compiled with the help of World Bank's Global Flaring and Methane Reduction (GFMR) Partnership.

Key Findings:
Global gas flaring in 2023 has increased by 7% from 2022 leading to a rise of 23 million tonnes of CO_2 emissions.
Major Contributor: Russia, Iran, Iraq, USA, etc.

About Gas Flaring:
Refers to burning of the natural gas associated with oil extraction.
Reasons: Safety Concern (de-pressurise the equipment). Economical (logistical issues in transporting gases from oil fields are located in remote and inaccessible places).
Key Measures taken: Zero Routine Flaring by 2030 (ZRF) initiative (World Bank)

25 JUNE

1. Srikakulam: Several scholars have been working to restore prominence of Srikakulam's forgotten heritage (located in Andhra Pradesh).

About Srikakulam:
History: Its former name was Chicacole, used by British colonial regime. **It was once part of Kalinga Dynasty.** Later it came under Gajapati Kingdom during the medieval period, followed by Eastern Chalukyas of Vengi. **It was also part of Kakatiya and Vijayanagara Empires.**

Cultural sites:
Buddhist sites: Salihundam (Buddhism spread to Sumatra and other eastern countries from here) and Danthapuri.
Jainism sites: Tangamayyakonda and Rottavalasa villages.
Hindu temples: Srimukhalingam, Srikurmam and Arasavilli.
Neolithic era caves: Nandi Hills

2. Skin Bank: A first-of-its-kind skin bank has been opened by the **Army Hospital in New Delhi**. Skin bank has as its **main functions the harvesting, processing, preservation, and supply**

of fine human skin allografts for burn treatment centers and polytrauma. This landmark initiative aims to revolutionise the treatment of severe burn injuries and other skin-related conditions among armed forces service members and their families. It **will serve as a centralised hub for the collection, processing, storage, and distribution of skin grafts.**

3. Kamakhya temple: Ambubachi Mela at Kamakhya temple in Assam has started. **The festival commemorates the yearly menstruation of Goddess Kamakhya.** Kamakhya temple is located on **the Nilachal hills (or Kamagiri).** Reconstructed in mid 16th century by the Koch dynasty (original temple was destroyed by Kala Pahar). **It is one of the 52 Shakti shrines (believed to be the place where the reproductive organ of Goddess Sati settled). Also a centre of Tantrik worship**. Here the beliefs and practices of the Aryan and non-Aryan communities converge.

26 JUNE

1. Renaming of States: Kerala Assembly has passed resolution to rename State as 'Keralam'

Procedure for Renaming of States: It can be initiated by the Parliament or State Legislature.
- Renaming is governed by **Article 3 of Constitution.**
- Article empowers **Parliament to alter name of any State by law**.
- Bill may be introduced in Parliament on recommendation of President.
- Then referred by the President to Legislature of that State for expressing their views.
- **Bill is passed in each house by a simple majority**.
- Following president assent, **change in name of state is recorded in First and Fourth Schedule of Constitution**.

2. Front Running: Front Running refers to **usage of non-public information to directly or indirectly buy or sell securities, or enters into options or futures contracts, in advance of a substantial order**. It is illegal in India. It undermines confidence in the financial markets and creates an uneven playing field for other investors. In 2022, Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 was amended to incorporate provisions to counter front running

3. Oath of Members of Parliament: The newly elected Members of Parliament (MP) of the 18th Lok Sabha have started taking oath. To debate and vote in the Parliament, an oath is taken.

Constitutional Provisions
- **Article 99 deals with oaths of office of the MPs**, to be subscribed before the President or some person appointed by him.
- The forms of oath are provided in the Third Schedule.
- **Article 104** provides a penalty for a member if he/she sits in the House without the oath.
- **Exception to this rule:** An individual can become a minister without being elected to Parliament. And, he/she can take part in proceedings of the house (without having the power to vote).
- Oaths can be subscribed in **English or any of the 22 Scheduled languages.**

4. Central Civil Services (Leave) (Amendment) Rules, 2024:

Central Civil Services (Leave) Rules, 2024 has been notified by the **Ministry of Personnel Public Grievances and Pensions.**

Key Amendments: Surrogate as well as commissioning mother with less than two surviving children, may be granted maternity leave of 180 days, in case either or both are Government servants**. Commissioning mother means intending mother of child born through surrogacy.** Central employee commissioning fathers with less than two living children, will also be entitled to get 15 days of paternity leave within six months of birth of child. Till now, there were no rules to grant maternity/paternity leaves for surrogacy.

27 JUNE

1. Biomass briquettes:
Composition: Compact blocks of organic materials like agricultural residues, forestry wastes, or waste biomass.
Briquetting Process: Densification of biomass to improve its characteristics as a renewable energy

resource.

Significance:
Carbon-Neutral: Unlike fossil fuels, they releases no additional CO_2 when burned. Help mitigate greenhouse gas emissions.
Supply Chain Resilience: Uses locally available feedstock, reducing exposure to price volatility and geopolitical uncertainties.
Harmful Chemicals in Food Packaging in Plastics: Some experts have raised concerns about heating food at high temperatures and then packing it in plastic containers which can cause harmful chemicals such as Bisphenol A, Phthalates, and Styrene to leach into food.

2. Bisphenol A (BPA): It is used in combination with other chemicals to manufacture certain plastics and resins. Long-term exposure to BPA has been linked to increased risks of breast and prostate cancer, etc.
Phthalates: It is **used to make plastics more flexible and durable**. It can interfere with endocrine system and disturb hormone regulation in the body.
Styrene: It is a **colourless, flammable liquid, which has sweet odour and is highly volatile**. It is a suspected carcinogen, can cause nervous system issues like headaches and dizziness upon exposure.

3. Exercise HOPEX: Exercise HOPEX is a joint military exercise between **Indian Air Force (IAF) and Egyptian Air Force.**
Aim - to promote bilateral and regional cooperation. IAF's Rafale fighter jets, C-17 Globemaster and IL-78 tankers are participating in the exercise.
Location – Egypt.

28 JUNE

1. Equal Remuneration Act, 1976: Recently the Ministry of Labour and Employment has taken note of media reports claiming that married women are not being allowed to work at Apple iPhone plant in India.

Equal Remuneration Act, 1976
- It provides for **equal remuneration to men and women workers** for the same work or work of similar nature.
- It prohibits discrimination while recruiting men and women workers.
- The Central Government may, by notification, make rules for carrying out the provisions of this Act

2. Prohibition of Insider Trading (PIT) Regulations:
- SEBI has amended PIT regulations to give flexibility to insider traders for trading plans.
- **Insider refers to any person (usually senior management and officials) in a company who has access to unpublished price sensitive information (UPSI).**
- Under PIT, insiders have a narrow window to carry out trades to avoid insider trading.
- **Insiders have to give a 'trading plan'** specifying the share price, amount, and transaction date in advance.
- It enables insiders to trade in securities in a compliant manner.

3. Central Electronics Limited (CEL):

CEL is granted "Mini RATNA" status (Category-1).

Eligibility for Mini Ratna (category 1): made profit in the last three years continuously, pre-tax profit is Rs.30 crores or more in at least one of the three years and have a positive net worth.

About CEL

- It is under the **Department of Scientific and Industrial Research (DSIR), Ministry of Science & Technology.**
- **Established in 1974**, with an objective to commercially exploit indigenous technologies.
- It is a **pioneer in the country in the field of Solar Photovoltaic (SPV).**

4. Microwave Obscurant Chaff Rocket (MOCR): DRDO handed over the Medium Range-Microwave Obscurant Chaff Rocket (MR-MOCR) to the Indian Navy.
MR-MOCR Developed by: DRDO's Defence Laboratory in Jodhpur.
Purpose: Obscure radar signals reduce detection.
Specification: Chaff is a passive electronic countermeasure consisting of electrically conducting fine fiber of resonant length to act as a microwave dipole.

Working mechanism: The rocket, when fired, forms a microwave obscurant cloud in space, thus creating an effective shield against hostile threats having Radio Frequency seekers.

29 JUNE

1. Factory Farming: Recently, a report raised concerns over intensive animal agriculture. (factory farming**). Factory Farming refers to a system of raising livestock and poultry** in high-density facilities under controlled conditions to **maximize production efficiency and output of dairy products at lower** cost.

Impacts of Factory Farming
- **Antibiotic-resistant:** Over 53% of egg samples exhibited resistance to multiple antibiotics in India (WHO Study, 2017).
- **Zoonotic Diseases:** Approximately 60% of known and 75% of emerging infectious diseases are zoonotic in origin (UN).
- **Environmental Degradation:** Responsible for 14.5% to 16.5% of global greenhouse gas emissions (FAO).
- **Health:** Diets high in animal products can increase risk of cardiovascular disease, cancer, diabetes, etc.

2. Mainland Serow: Scientists recorded a lone Mainland Serow (Capricornis Sumatraensis Thar) in western Assam's Raimona National Park.

About Mainland Serow
- **Habitat:** Areas in altitude of 200-3,000 meters in the Himalayas in Indian subcontinent, southern China, mainland Southeastern Asia, and Sumatra.
- **Characteristics:** It is a Mammal which is territorial and lives alone or in small groups.
- **3 other species of Serow:** Japanese Serow, Red Serow, and Taiwan or Formosan Serow.
- **Conservation Status**
  - **IUCN:** Vulnerable
  - **CITES:** Appendix I
  - **Wildlife (Protection) Act, 1972:** Schedule I.

3. President's Address to the Parliament: President addressed the joint sitting of Parliament after the formation of the 18th Lok Sabha.

About President's Address
- **Article 86** allows the President to address either House of Parliament or both Houses together.
- President has not so far addressed under this provision.
- **Article 87 of Constitution provides two instances when the President specially addresses both Houses of Parliament assembled together.**
- At the beginning of first Session after each general election.
- At the beginning of first session of each year.
- Originally, **Article 87(1) required the President to address both Houses of Parliament at the commencement of every session.**
- Constitution (First Amendment) Act, 1951, amended this provision.

4. Spring Initiative: UN-backed network Principles for Responsible Investment (PRI) has launched "Spring", a new initiative to halt or reverse nature loss by 2030.

About Spring Initiative

- Supported by a coalition of 200 investors managing a combined $15trn in assets.
- **Objective:** To ad**dress systemic risk of nature loss to societies and long-term portfolio value creation** by enhancing corporate practices on forest loss and land degradation.
- It focuses on **responsible political engagement, a vital aspect of corporate governance**

PRESS INFORMATION BUREAU (PIB)

1. INS Kiltan: **Indian Naval Ship Kiltan arrived at Muara, Brunei and was accorded a warm welcome by the Royal Brunei Navy.** It is an indigenously-built anti-submarine warfare stealth corvette. This is **the third of the four Kamorta-class corvettes being built under Project 28.** The ship derives its name from one of the islands in Aminidivi group of the strategically located Lakshadweep and Minicoy group of islands. **Designed by the Indian Navy's in-house organisation Directorate of Naval Design and built by Garden Reach Shipbuilders & Engineers (GRSE) in Kolkata**. It is India's first major warship to have a superstructure of carbon fibre composite material resulting in improved stealth features, lower top weight and maintenance costs. The ship hosts a predominantly indigenous cutting-edge weapons and sensors suite which includes **heavyweight torpedoes, ASW rockets, Medium Range gun and two multi-barrel 30 mm guns as close-in-weapon system (CIWS).**

2. Chang'e-6: The Chang'e-6 craft successfully landed in the South Pole-Aitken Basin on the back of the moon. **It is the first human sampling and return mission from the far side of the moon. It was launched by a Chinese Long March-5 rocket from Wenchang Space Launch Center** on the southern island of Hainan before 53 days. Chang'e-6 consists of an orbiter, a returner, a lander and an ascender. **The lander was equipped with multiple sensors, including microwave, laser and optical imaging sensors which can measure distance and speed and identify obstacles on the lunar surface.** The probe is scheduled to complete sampling within two days. **It has adopted two methods of moon sampling, which include: using a drill to collect subsurface samples, grabbing samples on the surface with a** **robotic arm.** It has achieved a breakthrough in the design and control technology of the lunar retrograde orbit and aims to realize key technologies of intelligent and rapid sampling. **It marks the second time a mission has successfully reached the far side of the moon. China first completed that historic feat in 2019 with its Chang'e-4 probe.**

3. James Webb Space Telescope (JWST): It was **launched in 2021 as a joint endeavour of the USA, European and Canadian space agencie**s. It is a large infrared telescope with an approximately 6.5 meter primary mirror. It does not orbit around the Earth like the Hubble Space Telescope, it orbits the Sun 5 million kilometers away from the Earth at what is called the second Lagrange point or L2. It was designed specifically to see farther across the cosmos and further back in time than any previous astronomical tool. One **of its key objectives was to find the very first stars to ignite in the nascent Universe.**

4. Paraparatrechina neela: It is a new ant species discovered from **Siang Valley in Arunachal Pradesh**. It **belongs to the rare genus Paraparatrechina and has been named Paraparatrechina neela.** The word "neela" signifies the colour blue in most Indian languages— a fitting tribute to the ant's unique colour. This discovery signifies the first new species of Paraparatrechina in 121 years since the description of the sole previously known species, P. aseta (Forel, 1902), in the Indian subcontinent. It is a **small ant with a total length of less than 2 mm. Its body is predominantly metallic blue, except for the antennae, mandibles, and legs.**

4 JUNE

1. **International Health Regulations:** In a landmark achievement in the global health security

agenda, the 77th World Health Assembly agreed to the package of amendments to the International Health Regulations (IHR 2005) **It was first adopted by the WHA in 1969 and last revised in 2005**, were conceived to maximise collective efforts to manage public health events while minimising disruption to travel and trade**. There are 196 State Parties to the IHR, comprising all 194 WHO Member States plus Liechtenstein and the Holy See**. The IHR provides an overarching legal framework that defines countries' rights and obligations in handling public health events and emergencies that have the potential to cross borders. **It is an instrument of international law that is legally binding on 196 countries.**

2. World No-Tobacco Day: The **Member States of the World Health Organization created World No Tobacco Day in 1987.** In 1988, a Resolution was passed, calling for the **celebration of World No Tobacco Day, every year on 31 May.** The annual campaign is an opportunity to raise awareness on the harmful and deadly effects of tobacco use and second-hand smoke exposure and to discourage the use of tobacco in any form.
The theme: "Protecting Children from Tobacco Industry Interference".

3. International Air Transport Association (IATA): IATA is an international trade association for the world's airlines, established in 1945 in Havana, Cuba, with 57 founding members. Its mission is "to represent, lead and serve the airline industry." IATA advocates for the interests of airlines on the world stage in addition to creating industry standards that simplify processes, increase safety, enhance passenger convenience, reduce costs, improve efficiency and help achieve sustainability goals. It **currently represents some 330 airlines, comprising over 80% of global air traffic. IATA members include the world's leading passenger and cargo airlines.**
Headquarters: Montreal, Canada.
The IATA Annual General Meeting & World Air Transport Summit, held in June each year,

formalises industry positions on industry and public policy issues and provides a focus for emerging industry issues.

4. Postal Ballot: It enables eligible voters to submit their votes via mail rather than personally visiting a polling place. This method provides a convenient option for individuals who are unable to participate in person due to various reasons.

Eligibility criteria to vote using postal ballots:
- **Service voters including members of the armed forces, paramilitary forces** and government employees assigned to election duties away from their home
- Electors on election duty **including government officials and polling staff working at polling stations outside their home areas.**
- Electors under preventive detention orders during the election period can also avail themselves of this option.
- Individuals engaged in essential services on polling day like essential workers, including authorized media personnel and those in railways and healthcare, can vote via postal ballots in Lok Sabha and four state Assembly elections.

Absentee voters: Those who are unable to vote in person due to work commitments, illness, or disability. **The amendment in October 2019 to the Conduct of Election Rules, 1961, lowered the eligible age for senior citizens from 85 to 80 and permitted Persons with Disabilities (PwDs) to use postal ballots in the 2020 Delhi Assembly elections.**

5 JUNE

1. Indo-Pacific Economic Framework for Prosperity (IPEF): India attends IPEF Ministerial meeting in Singapore **It was launched on 23 May 2022 at Tokyo, Japan comprising of 14 countries** – Australia, Brunei, Fiji, India, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand,

Philippines, Singapore, Thailand, Vietnam and USA. **The IPEF seeks to strengthen economic engagement and cooperation among partner countries with the goal of advancing growth, economic stability and prosperity in the region.** The framework is structured around four pillars relating to Trade (Pillar I); Supply Chain Resilience (Pillar II); Clean Economy (Pillar III); and Fair Economy (Pillar IV). India had joined Pillars II to IV of IPEF while it has maintained an observer status in Pillar-I.

2. Prithvi Vigyan Scheme: Consolidation of Programs: The Prithvi scheme unifies five existing sub- schemes:
 1. Atmosphere & Climate Research-Modelling Observing Systems & Services (ACROSS),
2. Ocean Services, Modelling Application, Resources and Technology (O- SMART),
3. Polar Science and Cryosphere Research (PACER),
4. Seismology and Geosciences (SAGE),
5. Research, Education, Training and Outreach (REACHOUT).
This integration is designed to enhance our understanding of Earth's systems and apply scientific knowledge for societal, environmental, and economic benefits.

Objectives and Focus Areas:
● **Comprehensive Observations:** The scheme emphasizes long-term monitoring across the atmosphere, ocean, geosphere, cryosphere, and solid earth to track Earth System's vital signs and changes.
● **Development of Predictive Models:** It focuses on creating models for weather, ocean, and climate hazards and advancing climate change science.
● **Exploration Initiatives:** Exploration of Polar Regions and high seas is a key aspect, aiming to discover new phenomena and resources.
● **Technological Advancements:** The **scheme also stresses the development of technology**

for the sustainable exploitation of oceanic resources for societal applications.

3. Maharani Temple: It is **situated on a small hillock in the heart of Gulmarg town in the Baramulla district of Jammu and Kashmir. Also known as the Rani Temple or Mohineshwar Shival**aya, the temple is dedicated to Lord Shiva and his consort, Parvati. It **was constructed by Mohini Bai Sisodia**, wife of the former ruler of Kashmir, Maharaja Hari Singh, in 1915. This **temple was once a royal temple of the Dogra dynasty of the erstwhile princely state of Jammu and Kashmi**r. It has been constructed in such a way that it can be seen from all corners of Gulmarg. The temple's intricate carvings and designs reflect a beautiful blend of Indian and Persian styles. It is **an example of religions intertwined with a Muslim priest performing rituals in the temple.** The **Indian Army collaborated with local communities in 2021 to restore this 106-year-old temple**. Apart from renovating the temple structure, the Indian Army also undertook the redesigning of pathways leading to the temple.

6 JUNE

1. UNESCO State of Ocean Report: The **UNESCO 'State of the Ocean Report', initiated by the Intergovernmental Oceanographic Commission (IOC-UNESCO) during the 2022 United Nations Ocean Conference,** serves as an accessible overview of the ocean's current status. It supports the monitoring of the UN Decade of Ocean Science for Sustainable Development (2021–2030) and encourages actions towards a sustainable ocean future. **The inaugural 2022 edition featured insights from over 100 marine science experts across various fields including ocean acidification, pollution, and tsunami warning.** This report, and its subsequent annual editions released on World Oceans Day (June 8), aligns with the seven outcomes of the UN Ocean Decade.

2. Special Category Status (SCS): In **1969, the Fifth Finance Commission of India introduced the Special Category Status to aid certain states in their development and accelerate growth if they faced historical economic or geographical disadvantages**. Factors considered for granting Special Category Status included challenging and hilly terrain, low population density, a significant tribal population, strategic border location, economic and infrastructural backwardness and non-viable state finances. However, the system was discontinued based on the recommendation of the 14th Finance Commission, which proposed addressing the resource gap of states by increasing the tax devolution from 32% to 42%. **The Centre pays 90% of the funds required in centrally-sponsored schemes, compared to 60% or 75% for other states.** Preferential treatment in getting central funds assistance, concession on excise duty to attract industries to the state, a significant 30% of the Centre's gross budget goes to the special category states etc**. Currently, eleven states have the Special Category Status in the country including Assam, Nagaland, Himachal Pradesh, Manipur, Meghalaya, Sikkim, Tripura, Arunachal Pradesh, Mizoram, Uttarakhand, and Telangana.**

3. Zircon materials: Zircon is a mineral belonging to the group of nesosilicates. **Its chemical name is zirconium silicate and the chemical formula is ZrSiO4**. Zircon crystals are notable for their high refractive indices and strong lustre. They are **naturally occurring in a variety of colours, including clear, green, red, yellow and brown. Zircon is used for radiometric dating due to its trace uranium content, allowing precise age determinatio**n. Its high resistance to weathering makes it valuable for studying sedimentary and metamorphic rock history, providing insights into geological and crustal development over billions of years. **Zircon grains are important for studying early Earth conditions. They can preserve isotopic signatures that provide insights into the environment and temperatures of ancient Earth**.

Zircon crystals found in the Jack Hills in Western Australia's Midwest can be up to 4.4 billion years old, providing insight into early Earth. **The study of oxygen isotopes in zircon crystals reveals the presence of fresh water and dry land on early Earth, challenging existing theories of a water-covered Earth**. This interaction may have created conditions conducive to life, with the water cycle operating at least 4 billion years ago.

1. World Wealth Report 2024: It is **released by the Capgemini Research Institute**. It **covers 71 countries, accounting for more than 98% of global gross national income and 99% of world stock market capitalization.** Global high-net-worth individuals (HNWI) wealth expanded by 4.7% in 2023, reaching $86.8 trillion. Similarly, the HNWI population increased by 5.1% to 22.8 million globally. HNWIs are individuals with investable assets of $1 million or more, excluding thr primary residence, collectibles, consumables, and consumer durables. **A resilient economy and robust performance of the equity markets drove wealth growth of these countries**. HNWI in India increased by 12.2% in 2023 vs 2022, bringing the total number of HNWI population. The country's national savings as a percentage of GDP also increased to 33.4% in 2023, compared to 29.9% in 2022.

2. Onge Tribe: Onges are one of the most primitive tribes in India that belong to the Negrito racial ancestry. They are inhabiting Little Andaman Island, the most southerly island in the Andaman archipelago. They are a **semi-nomadic group and are dependent on the ocean and the forest for sustenance**. Unlike other religions, they do not believe in or follow firm worshipping practices or sacrifices. The colour of the teeth has a unique interpretation among Onges, who consider the pearly white teeth a symbol of death. They continue to chew the bark to impart a red colour to their teeth. They decorate their bodies and their

faces with white and ochre clay. On special occasions, they place a greater emphasis on body ornamentation. Until the 1940s, the **Onge were the sole permanent inhabitants of Goubalambabey (the Onge name for Little Andaman).** The Onge population was also decimated following contact with British colonists and Indian settlers; it fell from 670 in 1900 to only 96 members by the early 2000s. In 1976, the Onge were settled in order to have 'the basic facilities for hygienic living and protection against elements of nature'. **They now live in a reserve in Dugong Creek (Little Andaman) that is a fraction of the size of their original territory. The Onge tribe is also one of the world's least prolific and infertile communities. Infertility affects somewhat more than 40% of married couples.**

3. United States–India Initiative on Critical and Emerging Technology (iCET): The Initiative on Critical and Emerging Technologies (iCET) is a framework for cooperation between India and the United States on critical and emerging technologies, it was launched in January 2023. **It aims to strengthen its strategic partnership and drive technology and defence cooperation in areas such as artificial intelligence, quantum computing, semiconductors, and wireless telecommunication**. The partnership aims to position India and the United States as "trusted technology partners" to build supply chains and support the co-production and co-development of items.

Private sector and academic involvement: The iCET requires the private sector, knowledge partners, and academia in both countries to give functional meaning to the outcomes and provide the necessary strategic and operational assurances to the private sector.

8 JUNE

1. World Oceans Day: It is **celebrated annually on June** 8. This day aims to raise awareness about the critical role oceans play in our planet's

ecosystem. Oceans cover more than 70% of the Earth's surface and are crucial for **regulating the climate, providing food and oxygen, and supporting a diverse range of marine life.** They are also essential for human livelihoods, supporting industries such as fishing, tourism, and shipping. The event encourages global collaboration for sustainable ocean management, addressing issues such as pollution, overfishing, and climate change.

The theme for 2024 World Oceans Day is "Awaken New Depth".

History: The concept of World Oceans Day was first proposed in 1992 at the Earth Summit in Rio de Janeiro, Brazil. This global event, officially known as the United Nations Conference on Environment and Development (UNCED), highlighted the critical role oceans play in sustaining life on Earth. The idea gained momentum over the years, leading to its official recognition by the United Nations in 2008. **The UN General Assembly designated June 8 as World Oceans Day, aiming to raise awareness about the importance of oceans and the urgent need to preserve them**. Every year, the UN Division for Ocean Affairs and the Law of the Sea organises events to create public awareness.

2. **National Health claim Exchange**: The Health Ministry along with the IRDAI are launching the National Health Claim Exchange (NHCX), a digital platform which will bring together insurance companies, healthcare sector service providers and government insurance scheme administrators. **It aims to enhance efficiency, transparency, and accuracy in claims processing by facilitating the exchange of health insurance claims data among various stakeholders, including payers, providers, beneficiaries, regulators, and observers**. The integration with NHCX is expected to enable seamless interoperability of health claims processing, enhancing efficiency and transparency in the insurance industry, benefiting policyholders and patients **The NHCX aligns with the goals of**

the Ayushman Bharat Digital Mission, which aims to simplify the health insurance claims procedure and create a unified digital platform for healthcare services.

3. Santiago Network for Loss and Damage: It is a global initiative established in December 2019 to support developing countries in averting, minimizing, and addressing loss and damage caused by climate change. **The network aims to catalyse technical assistance from various organizations, bodies, networks,and experts to enhance the capacity of vulnerable countries to manage climate-related loss and damage.** The Santiago Network provides technical assistance to developing countries for addressing climate change-related loss and damage by offering access to knowledge, resources and expertise. It aims to build capacity by connecting vulnerable nations with technical assistance providers, including civil society, NGOs, and the private sector. The **network also plays a crucial role in facilitating the effective use of the Loss & Damage Fund from COP28.**

10 JUNE

1. Types of Election methods:

- **Proportional Representation:** The Proportional Representation (PR) system ensures representation of all parties based on their vote share. **The most commonly used PR system is the 'party list PR' where voters vote for the party (and not individual candidates) and then the parties get seats in proportion to their vote share.**
- **First Past the Post System:** India currently uses the First Past the Post (FPTP) system, where the **candidate with the most votes in a constituency wins. The FPTP system is simple and provides stability to the executive**, but it can lead to unrepresentative governments.

- **Mixed Member Proportional Representation (MMPR):** To balance stability and proportionate representation, the Mixed Member Proportional Representation (MMPR) system can be considered. **Under MMPR, there is one candidate elected through FPTP from each territorial constituency, and additional seats are allocated to parties proportionally based on their vote share.**

2. Cabinet Committee on Security (CCS): It **is headed by the Prime Minister**. The Committee discusses, debates, and is the apex body when it comes to the appointments of the officials in the national security bodies. It also **makes all the important decisions on defence policy and expenditure and, generally, all matters of India's security.**

Members: PM, Ministers of Defence, Home Affairs, Finance and External Affairs.

It deals with all the issues related to the defence and security of India. **The CCS deals with all issues related to the law and order and national security of India**. It discusses different initiatives to take to enhance the national security of India. It also deals with policy matters of foreign affairs which may have a bearing on internal or external security implications, including cases relating to agreements with other countries on security-related issues. The Committee discusses the political issues which can impact the security of our nation.

3. **Quantum Data:** A new quantum computing study claims that a recent finding in the production, storage and retrieval of "quantum data" has brought us one step closer to the quantum internet. It **refers to information that is stored and processed using the principles of quantum mechanics. Unlike classical data, which is represented by binary states (0s and 1s), quantum data is represented by quantum bits or qubits.** Qubits can exist in multiple states simultaneously due to a property called

superposition, and they can be entangled with other qubits, allowing for a kind of interconnectedness and correlation that classical bits cannot achieve.

12 JUNE

1. Notified Disasters: In India, the **Disaster Management Act, 2005, defines a disaster as a "catastrophe, mishap, calamity or grave occurrence"** arising from natural or man-made causes that results in substantial loss of life, destruction of property, or damage to the environment. **The Act includes 12 categories of notified disasters, which are: Cyclone, Drought, Earthquake, Fire, Flood, Tsunami, Hailstorm, Landslide, Avalanche, Cloudburst, Pest attack, Frost and cold waves.** These notified disasters are eligible for relief assistance under the State Disaster Response Fund (SDRF) and National Disaster Response Fund (NDRF). The SDRF is primarily used for immediate relief to victims of notified disasters, while the NDRF supplements the SDRF in cases of severe disasters where funds are insufficient. **However, heatwaves are not currently included as a notified disaster under the Act.** Although heatwaves are a significant concern in India, particularly in certain regions, the Finance Commission has not been convinced to expand the list of notified disasters. **States can use up to 10% of their SDRF allocation for local disasters, including heatwaves, which some states have done.**

2. Pradhan Mantri Awas Yojana: Pradhan Mantri Awas Yojana (PMAY) is a credit-linked subsidy scheme initiated to provide affordable housing to low and moderate-income residents across the country. The newly formed government has approved the proposal to provide 3 crore additional rural and urban houses under PMAY. **The scheme has two components: PMAY-U for the urban poor and PMAY-G and PMAY-R for the rural poor.**

PMAY-U (Urban): This is to provide housing for all in urban areas.

- **Beneficiaries:** Economically Weaker Section (EWS), Low-Income Group (LIG) and Middle-IncomeGroup (MIG).
- **Subsidy Schemes:** Credit Linked Subsidy Scheme: Offers interest subsidy on home loans for EWS,LIG, and MIG categories.
- **In-Situ Slum Redevelopment:** Utilizes land as a resource to provide houses to eligible slum dwellers.
- **Affordable Housing in Partnership:** Promotes partnerships with public and private sectors to provideaffordable housing.
- **Beneficiary-Led Construction:** Provides financial assistance to individuals to construct or enhancetheir own houses.

3. PMAY-G (Gramin): Its objective is to provide a pucca house with basic amenities to all ruralfamilies who are homeless or living in kutcha or dilapidated houses.

- **Beneficiaries:** Identified using the Socio-Economic and Caste Census (SECC) 2011.
- **Features:** Financial Assistance: 1.2 lakh in plain areas and Rs. 1.3 lakh in hilly, difficult and IntegratedAction Plan (IAP) areas.
- **Construction:** Houses are to be constructed by beneficiaries with technical assistance from thegovernment.
- **Convergence with other schemes:** Encourages convergence with other schemes like Swachh Bharat Mission (SBM) for toilet construction, and MGNREGA for wage employment.

4. Air LORA: It is an air-**launched variant of the Long-Range Artillery (LORA) ballistic missile. It isdesigned and developed by Israel Aerospace Industries (IAI)**. It is a long-range air-to-ground missile (AGM) developed for strike missions against high-value and well-protected targets such as command centres,air force bases, infrastructure, and naval vessels in dense littoral environments. **With a robust warhead of various types, Air**

LORA enables air forces to strike enemy targets from far distances outside the reach of enemy air defences. It features high survivability with advanced immune INS/GNSS navigation and strong anti-jamming capabilities, allowing for 24/7 operation in extreme weather conditions and highly contested battlefields. It can be simply integrated into airborne platforms as a stand-alone configuration or through the avionics system" and is easy to operate, "with simple fire-and-forget and autonomous operation. It has a **very high mission success rate mainly due to its supersonic speed and its combat-proven GNSS anti-jamming system"**, as well as terminal trajectory shaping and a 90° attack angle.

13 JUNE

1. General Anti-Avoidance Rule (GAAR): GAAR is an anti-tax avoidance law in India to curb tax evasion and avoid tax leaks. It **came into effect on 1st April 2017. The GAAR provisions come under the Income Tax Act, 1961.** It is a tool for checking aggressive tax planning, especially those transactions or business arrangements that are entered into with the objective of avoiding tax. It is **specifically aimed at cutting revenue losses that happen to the government due to aggressive tax avoidance measures practiced by companies. It is meant to apply to transactions that are prima facie legal, but result in tax reduction.**

Broadly, tax reduction can be divided into three categories.

Tax mitigation is a 'positive' term in the context of a situation where taxpayers take advantage of a fiscal incentive provided to them by tax legislation by complying with its conditions and taking cognisance of the economic consequences of their actions. Tax mitigation is permitted under the Act. This tax reduction is acceptable even after GAAR has come into force.

Tax evasion is when a person or entity does not pay the taxes that are due to the government. This is illegal and liable to prosecution. Illegality, wilful suppression of facts, misrepresentation, and fraud—all constitute tax evasion, which is prohibited under law. This is **also not covered by GAAR, as the existing jurisprudence is sufficient to cover tax evasion/Sham transactions.**

Tax avoidance includes actions taken by a taxpayer, none of which are illegal or forbidden by the law.

2. Consumer Food Price Index (CFPI): The **Consumer Food Price Index (CFPI) is a measure of change in retail prices of food items consumed by the population.** It is a specific measure of inflation that focuses exclusively on the price changes of food items in a consumer's basket of goods and services. **The CFPI is a sub-component of the broader Consumer Price Index (CPI) and is used by the Reserve Bank of India (RBI) to track inflation**. **The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation (MOSPI) started releasing CFPI for three categories - rural, urban and combined** - separately on an all-India basis with effect from May 2014. Like Consumer Price Index (CPI), the CFPI is also calculated on a monthly basis and the methodology remains the same as CPI. **The base year presently used is 2012.** The CSO has revised the Base Year of the CPI and CFPI from 2010 to 2012 in January 2015.

3. **G7 (Group of Seven)**: It is an intergovernmental political and economic forum.

Members: Canada, France, Germany, Italy, Japan, United Kingdom, and United States; European Union as a non-enumerated member

The G7 was established in 1975. Russia was included in the late 1990s, creating the G8, but was suspended in 2014 after the annexation of Crimea.

Function: The G7 meets annually to discuss and

coordinate economic policies. The leaders address many global issues, including monetary policy, security, energy, and climate change.

Significance: While the G7 cannot enact laws, its past decisions have had significant global consequences

Summits: The annual G7 summit is hosted by one of the member countries, which rotates each year. The summits provide a platform for the leaders to discuss pressing global issues and coordinate policy responses.

The **2024- G7 summit will take place from June 13-15 in Apulia, Italy. Italy holds the G7 presidency in2024.**

14 JUNE

1. **Improvised Explosive Device (IED): It is a type of unconventional explosive weapon that can take any form and be activated in a variety of ways. They are used by criminals, vandals, terrorists, suicide bombers and insurgents**. Because they are improvised, IEDs can come in many forms, ranging from a small pipe bomb to a sophisticated device capable of causing massive damage and loss of life. The extent of damage caused by an IED depends on its size, construction, and placement, and whether it incorporates a high explosive or propellant. **The term IED came into common usage during the Iraq War that began in 2003.**

Components of an IED:

- All IEDs consist of an initiating mechanism: a detonator, an explosive charge and a casing or collection of projectiles (such as ball bearings or nails) that produces lethal fragments upon detonation.
- **Materials used as explosives in IEDs:** In practice, IEDs can be made of many different kinds of objects and materials, including **artillery or mortar rounds, aerial bombs, certain types of fertilizers, TNT and other explosives.**
- IEDs can also contain **radiological, chemical or biological components** to increase their

lethal and psychological effects.

2. Nagastra-1: The **Indian army has integrated the Nagastra 1 loitering munition, designed by Economic Explosives Limited (EEL), as its first indigenous man-portable suicide drone**. These drones enhance the army's precision strike capabilities against enemy training camps and infiltrators, with a focus on reducing dependence on imports and promoting self-reliance in defence technology. With the potential for exports to friendly nations, Nagastra 1 showcases India's advancement in developing cost-effective solutions for modern warfare**. The Nagastra-1 is fully designed and developed in India, with an indigenous content of over 75%.The drone can carry out GPS-enabled precision strikes with an accuracy of 2 meters and has a range of almost 30 km**. The drone has a low acoustic signature and electric propulsion, making it a silent killer. The drone has a parachute recovery mechanism, which can bring back the munition in case of an aborted mission, enabling it to be used multiple times. The drone weighs 6 kg and can stay airborne for up to 60 minutes.

3. Lipulekh Pass: It is a high-altitude mountain pass located in the Kumaon region of Uttarakhand, near the tri junction of India, Nepal and China. It **links the Indian state of Uttarakhand with the Tibet region of China**.

- **Ancient Trade Route:** It has been utilized for centuries as a trade route, connecting the Indiansubcontinent with the Tibetan plateau.
- **Religious Significance:** The pass also has religious significance, being an integral part of the Kailash Mansarovar Yatra, a sacred pilgrimage for Hindus.
- Devotees undertake this arduous journey to reach Mount Kailash, considered the abode of Lord Shiva,and the nearby Mansarovar Lake.
- It is the first Indian border post opened for trade with China in 1992.
- This was **followed by the opening of Shipki**

La Pass, Himachal Pradesh in 1994 and Nathu LaPass, Sikkim in 2006.

15 JUNE

1. **JIMEX- 2024:** This is **the eighth edition of JIMEX between India and Japan since its inception in 2012**. The exercise includes both harbour and sea phases. Other Exercises between India and Japan:

Malabar: India and Japan with the United States and Australia participate in the naval war gaming exercise named Malabar.

SHINYUU Maitri (Air Force)

Dharma Guardian (Military Exercise).

2. **Teesta River:** It is a **tributary of the Jamuna River (Brahmaputra River), flowing through India and Bangladesh**. It originates as Chhombo Chhu from a glacial lake Khangchung Chho.Teesta Khangse glacier and Chho Lhamo are also considered as the source of Teesta River by many authors. **It flows to the south, cutting a deep gorge through the Siwalik Hills east of Darjiling (West Bengal) and turns southeast to run through the Sivok Khola pass onto the plains of West Bengal. The river continued southward to empty directly into the upper Padma River (Ganga River).**However, the river changed its course to flow eastward, crossing the Rangpur region of Bangladesh to join the Jamuna River.

The major tributaries of Teesta river:

Left-bank Tributaries: Lachung Chhu, Chakung Chhu, Dik Chhu, Rani Khola, Rangpo Chhu.

Right-bank Tributaries - Zemu Chhu, Rangyong Chhu, Rangit River.

3. **Divya Drishti AI Tool**: **The AI tool "Divya Drishti" integrates face recognition with immutable physiological parameters such as gait and skeleton. It was developed by** **Ingenious Research Solutions Pvt Ltd., a start-up established by a woman entrepreneur, Shivani Verma**. This innovative solution marks a significant advancement in biometric authentication technology, offering enhanced accuracy and reliability in identifying individuals. This dual approach enhances identification accuracy, minimizing the risk of false positives or identity fraud and has versatile applications across diverse sectors including Defence, Law Enforcement, Corporate and Public Infrastructure. **The AI tool has been developed under the technical guidance and mentoring of the Centre for Artificial Intelligence & Robotics (CAIR), a laboratory of DRDO based in Bangalore.**

4. **Digital Firewall:** A **digital firewall is a software-based network security device that monitors and filters network traffic based on predefined security rules**. It is designed to prevent unauthorized access to a network by controlling incoming and outgoing traffic**. Digital firewalls can be installed on individual devices, such as computers or servers, and are often used in conjunction with other security measures like antivirus software to provide comprehensive protection against cyber threats.** Though in recent times they are associated with censorship by oppressive governments, firewalls were meant to be a security tool. **Large firewalls like the Great Firewall of China, for example, are highly complex cybersecurity tools maintained at scale to prevent people from accessing large sections of the Internet.**

17 JUNE

1. **Exercise Red Flag 2024:** This **was the second edition of Ex Red Flag 2024, which is an advanced aerial combat training exercise, held four times in a year by the US Air Force**. Participation of the Indian Air Force along with Republic of Singapore Air Force (RSAF), Royal Air Force (RAF) of the United Kingdom, Royal Netherlands Air Force (RNLAF), German Luftwaffe, and the US Air Force (USAF). **Red Flag is an air combat exercise featuring realistic**

combat scenarios. **This year marked the debut of the Indian Air Force's Rafale aircraft in the exercise.**

2. Pantanal Wetland: It is **the world's largest tropical wetland**. It is located in the upper Paraguay River basin, the Pantanal straddles Brazil's border with Bolivia and Paraguay. **About 80 percent of the Pantanal is in Brazil. It was developed in a structural basin formed as the Andes Mountains rose**. The climate is tropical, wet and dry. It is one of the most biologically rich environments on the planet, with more than 4,700 plant and animal species. **It has the largest concentration of crocodiles in the world. In 2000, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) declared a small portion of the Pantanal a World Heritage Site.** Around 95% of the Pantanal is under private ownership, the majority of which is used for cattle grazing.

3. Global Gender Gap Report: It is an annual index designed to measure gender equality. It **benchmarks gender-based gaps in four areas: economic participation and opportunity; educational attainment; health and survival and political empowerment. It is released by the World Economic Forum (WEF).** It is the longest-standing index tracking the progress of numerous countries' efforts towards closing these gaps over time since its inception in 2006.

Highlights of 2024 Report:

- The **global gender gap score in 2024 for all 146 countries stands at 5%,** a 0.1 percentage point improvement on last year.
- **India slipped two places to 129th place** as Iceland retained its top position in the rankings for the 15th consecutive year.
- It was followed in the top 10 by **Finland, Norway, New Zealand, Sweden, Nicaragua, Germany, Namibia, Ireland, and Spain.**
- In South Asia, **India was ranked fifth** after Bangladesh, Nepal, Sri Lanka, and Bhutan, while Pakistan was ranked last.

- In the world, Sudan was ranked last on the index of 146 countries, while Pakistan fell three places to 145th.

India showed the best gender parity in terms of enrolment in secondary education and ranked 65th globally on political empowerment of women. With regard to parity in number of years with female/male heads of state for the last 50 years, India ranked 10th.

20 JUNE

1. World Refugee Day: World Refugee Day is annually celebrated globally on June 20th. This day is dedicated to the millions of people who have been forced to escape their homes due to war, persecution, or natural catastrophes. **The first ever World Refugee Day was celebrated on June 20, 2001, to commemorate the 50th anniversary of the 1951 Convention relating to the Status of Refugee**s. The day was earlier recognized as Africa Refugee Day, and later in December 2000, the United Nations General Assembly (UNGA) officially declared it an International Day for Refugees. The **theme of World Refugee Day 2024 is 'For a World Where Refugees Are Welcomed.' According to the 1951 Refugee Convention, a person is considered a refugee if they are unable to return to their homeland because they have a legitimate fear of being harmed because of their race, religion, involvement in a social group**, or differing political opinions.

Refugees are forced to flee their homes due to conflict, persecution, violence, or other forms of human rights violations. They often arrive in host countries with nothing but the clothes on their backs. Although relocating to a foreign country is the stereotypical picture of a refugee, these international refugees represent a relatively small percentage of all displaced individuals worldwide. **Other non-typical refugee categories include stateless individuals, who have no country of citizenship claimed against them, and asylum**

seekers, who travel in search of international protection.

2. Sustainable Development Report (SDR): It reviews progress made each year on the Sustainable Development Goals (SDGs) since their adoption by the 193 UN Member States in 2015.It is **annually published by the Sustainable Development Solutions Network (SDSN).**

 Highlights of SDR 2024:
- Published on the eve of the UN Summit of the Future, the SDR 2024 recommends a set of key reforms to the UN system to meet the challenges of the 21st century.
- **Theme: The SDGs and the UN Summit of the Future**
- This year's edition also presents a new index of countries' support for UN-based multilateralism and discusses long-term pathways to attain sustainable food and land systems.
- This year, **Finland, Sweden, and Denmark top the rankings**. Globally, only 16% of the SDG targets are on track to be achieved by 2030, with the remaining 84% showing limited progress or its reversal.
- Barbados ranks the highest in its commitment to UN-based multilateralism; the United States ranks last.
- SDG targets related to food and land systems are particularly off-track. The **SDR presents new FABLE (Food, Agriculture, Biodiversity, Land, and Energy) pathways to support sustainable food and land systems.**

3. e-Shram Portal: The Indian delegation to the 112th International Labour Conference (ILC) led by Secretary, Ministry of Labour & Employment showcased the e-Shram portal and its present integrations and achievements during the sidelines of the ILC at Geneva, Switzerland. It was **launched by the Ministry of Labour and Employment in 2021 for registration and creation of a comprehensive National Database of Unorganized Workers**. It allows an unorganised worker to register himself or herself on the portal on self-declaration basis, under 400 occupations in 30 broad occupation sectors. It is a **"One-Stop-Solution" for Unorganised Workers of the country. The registration in the portal is fully Aadhaar verified and Aadhaar seeded**. Any unorganised worker can register himself or herself on the portal on a self-declaration basis. The Ministry aims to facilitate access to various social security schemes being implemented by various Ministries/ Departments for the benefit of the unorganised workers through the e-Shram portal. Th**e portal is presently integrated with National Career Service (NCS) Portal, Skill India Digital Hub (SIDH), myScheme portal and Pradhan Mantri Shram Yogi Mandhaan (PMSYM) scheme.**

22 JUNE

1. Rishi Sakhi Convergence Program: It aims to transform rural India through the empowerment of rural women as **Krishi Sakhi, by imparting training and certification of Krishi Sakhis as Para-extension Workers**. This certification course also aligns with the objectives of the 'Lakhpati Didi' Program.**

Krishi Sakhis have already been trained on various extension service-
1) Agro-Ecological Practices: From land preparation to harvest. Organizing Farmer Field Schools: Facilitating practical learning sessions for farmers.
2) Seed Banks: Establishment and management.
3) Soil Health and Conservation: Techniques for maintaining soil health and moisture.
4) Integrated Farming Systems: Combining various farming practices for sustainability.
5) Livestock Management: Basic management practices for livestock.
6) Bio Inputs: Preparation, use, and establishment of bio-input shops.
7) Communication Skills: Essential skills for effective communication with farmers.
Now these Krishi Sakhis are undergoing refresher training with a special focus on Natural Farming

and Soil Health Card through DAY-NRLM agencies in coordination with MANAGE.

Krishi Sakhi Training Program has been rolled out in 12 states in Phase – 1: Gujarat, Tamil Nadu, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Karnataka, Maharashtra, Rajasthan, Odisha, Jharkhand, Andhra Pradesh, and Meghalaya.

2. Chenab Rail Bridge: The Indian Railway conducted a successful trial run on the newly-constructed world's highest railway bridge, Chenab Rail Bridge, in Jammu and Kashmir. **It is located between Bakkal and Kauri in the Reasi district of Jammu and Kashmir (J&K).** The 1.3-km-long bridge is located 359 metres above the Chenab riverbed**. It is the highest single-arch railway bridge in the world.** It is part of the Udhampur-Srinagar-Baramulla Rail Link project. The construction of the Chenab bridge has been a collaborative effort, involving various international organizations and renowned Indian institutions, including **the Indian Institutes of Technology (IITs), the Defence Research and Development Organisation (DRDO), and the Geological Survey of India.**
Features:
It is **built to be 'blast-proof'** and is capable of withstanding the nation's maximum intensity zone-V earthquake forces.

3. Chenab River:
It is a major river of India and Pakistan. It is a **tributary of the Indus river.**
Course:
Origin: It is formed by the confluence of two streams**, Chandra and Bhaga**, at Tandi in the upper Himalayas in the Lahaul and Spiti Districts of Himachal Pradesh.In its upper reaches**, it is also known as the Chandrabhaga**. It flows west through Jammu and Kashmir union territory, between the steep cliffs of the Siwalik Range (south) and the Lesser Himalayas (north). Turning southwest, it continues into Pakistan, descending from the uplands into the broad alluvial lowlands of Punjab province. **After receiving the Jhelum River near**

Trimmu, the Chenab empties into the Sutlej River, a tributary of the Indus River.
Tributaries: The tributaries of the Chenab River include Miyar Nalla, Sohal, Thirot, Bhut Nalla, Marusudar and Lidrari.

4. The Trinity Challenge (TTC): It is a charity supporting the creation of data-driven solutions to help protect against global health threats. **It is a partnership of over 40 leading global organizations across the private, public, and social sectors.** TC partners are united by the common aim of using data and advanced analytics to create inclusive innovations and build a world that's better prepared for health emergencies. To that purpose, TTC is launching, supporting, and funding public challenges. **It was launched in response to the Covid-19 pandemic, which highlighted a global need to be better prepared to tackle healthcare emergencies**. The initial Challenge asked teams to deliver data-driven solutions to predict, respond to and recover from pandemics. It awarded £5.7 million to teams that developed innovative tools and approaches for better pandemic preparedness and response. **Following the success of the first Trinity Challenge, the second Challenge - The Trinity Challenge on Antimicrobial Resistance (AMR),** issues a call to **the world's best and brightest minds for data-driven solutions that will protect the power of antibiotics.**

23 JUNE

1. National Testing Agency (NTA): The NTA is an autonomous organization in India responsible for conducting entrance examinations for higher educational institutions. The **NTA was established in November 2017 by the Ministry of Education** to standardize and streamline the conduct of entrance exams across the country.
Objective: To improve the quality and transparency of entrance examinations, ensuring fairness and efficiency in the assessment process.

Functions:
1) Conducting Exams: The NTA conducts various national-level entrance examinations for

admission to undergraduate and postgraduate programs.

2) Developing Question Papers: The NTA is responsible for developing high-quality question papers.

3) Result Processing: The NTA processes examination results efficiently, ensuring timely release of scores and ranks.

Headquarters: New Delhi

Overall, the National Testing Agency plays a crucial role in India's education system by providing a **reliable, transparent, and efficient framework for conducting entrance examinations.**

2. Space Variable Objects Monitor (SVOM): It is a F**rench-Chinese satellite which aims to detect and study gamma-ray bursts.** It was launched by a **Long March-2C rocket from the Xichang Satellite Launch Center** in southwest China's Sichuan Province. It is a 930-kilogram satellite carrying four instruments - two French and two Chinese. **The satellite has been sent into an orbit over 600 kilometers above Earth and has a designed life of five years,** though scientists expect it could be operational for as long as 20 years.

Gamma-ray bursts (GRBs): GRBs generally occur after the explosion of huge stars - those more than 20 times as big as the sun - or the fusion of compact stars. The extremely bright cosmic beams can give off a blast of energy equivalent to over a billion billion suns. The rays carry traces of the gas clouds and galaxies they pass through on their journey through space - valuable data for better understanding the history and evolution of the universe. **GRBs are notoriously hard to catch as they can appear anywhere in the sky and last for just a few seconds**. They are readily absorbed by the Earth's atmosphere, so the only way to record them is to place probes in space.

3. Fast Track Immigration Trusted Traveller Programme (FTI-TTP): The Union Home Minister recently inaugurated the Fast Track Immigration Trusted Traveller Programme (FTI-TTP) at Indira Gandhi International (IGI) Airport. It is **an initiative by the Central Government,** **designed for faster, smoother, and safer immigration clearance**. It is likely to help reduce congestion at airports by offering expedited emigration and immigration clearance for pre-verified travellers. **The Ministry of Home Affairs collaborated with the Ministry of Civil Aviation and the Bureau of Immigration for the FTI-TTP.** The FTI-TTP is similar to the Global Entry Program offered by the United States. **It allows pre-approved and low-risk travellers to benefit from expedited immigration and security clearance upon arrival.** Other than New Delhi, the FTI-TTP was launched in Mumbai, Chennai, Kolkata, Bengaluru, Hyderabad, Kochi, and Ahmedabad airports in the first phase. **The FTI-TTP would run on e-gates or automated border gates that would minimise human intervention in the immigration clearance process and would be implemented in two phases**. In the first phase, Indian citizens and OCI cardholders will be covered, and foreign travellers will be included in the second phase. The FTI-TTP will be implemented through an online portal, and the Bureau of Immigration will be the nodal agency.

4. International Hydrographic Organisation: On 21 June every year, the International Hydrographic Organisation (IHO) celebrates the World Hydrography Day to raise awareness about hydrography. It is an intergovernmental organization that works to ensure all the world's seas, oceans and navigable waters are surveyed and charted. It **was established in 1921, it coordinates the activities of national hydrographic offices and promotes uniformity in nautical charts and documents**. It issues survey best practices, provides guidelines to maximize the use of hydrographic survey data and develops hydrographic capabilities in Member States.

Member countries: It has currently 100 Member States.

The IHO Secretariat has been hosted by the Principality of Monaco. India has been an active member of the International Hydrographic Organization (IHO) since 1955. **The Indian Naval Hydrographic Department (INHD), or the Marine Survey of India earlier, was**

established in 1874 in Kolkata. **It is the nodal agency for hydrographic surveys** and has a fleet of indigenously built modern survey ships.

25 JUNE

1. International Sugar Organisation: India is hosting a global event in sugar sector 'ISO Council Meeting' in New Delhi. **International Sugar Organisation (ISO) is a UN affiliated body having HQ at London**. ISO has about 85 countries as members covering almost 90% of sugar production in the World. It is mandated to bring major sugar producing, consuming and trading nations together to bring mutual understanding and progressive approach in dealing with issues pertaining to the sugar sector**. ISO has also been working on biofuels, especially, ethanol as sugarcane is the second major feedstock for ethanol production in the world**. India is the world's largest consumer and second largest producer of sugar in the world.

2. National Agricultural Cooperative Marketing Federation of India Ltd: It is an apex organization of marketing cooperatives for agricultural produce in India. I**t was founded on 2 October 1958 to promote the trade of agricultural produce and forest resources** across the nation. It is **registered under Multi State Co-operative Societies Act.** With its headquarters in New Delhi, NAFED has four regional offices in **Delhi, Mumbai, Chennai and Kolkata, apart from 28 zonal offices in capitals of states and important cities**.
Functions:
* It is the **nodal agency to implement price stabilization measures under "Operation Greens"** which aims to double the farmers' income by 2022.
* Along with FCI the **NAFED is involved in the procurement of oilseeds, pulses and copra under the Price Support Scheme (PSS).**

3. e-Samridhi Portal: It was **launched through National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) and National Cooperative Consumers' Federation of India Limited (NCCF).** It is for registration of farmers and the government is committed to procure pulses at Minimum Support Prices (MSP) for farmers registered on the portal. Portal registration of farmers can be done directly or through Primary Agricultural Credit Societies (PACS) and FPO. **The payment to the farmers will be made by NAFED directly into their mapped bank account and no agency will be involved in between.**

4. UNESCO Creative Cities Network (UCCN): Kozhikode, a city in north Kerala celebrated for its rich cultural heritage, has been officially declared as India's first UNESCO City of Literature under the UNESCO Creative Cities Network. It was created in 2004 to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development. Almost 300 cities around the world currently make up this network.
Objective: Placing creativity and cultural industries at the heart of their development plans at the local level and cooperating actively at the international level.
UNESCO designates the creative cities in seven fields: **craft, folk art, media arts, film design, gastronomy, literature, and music.**
Every year, UNESCO seeks applications from various cities across the globe to put them under its UCCN project.
The applications in India are routed through the Ministry of Culture.
India's other cities in UCCN are-
Srinagar and Jaipur: in the field of crafts and folk arts
Mumbai: Film category
Chennai, Gwalior and Varanasi: Music category
Hyderabad: Gastronomy category

26 JUNE

1. Project Akashteer: It is a cutting-edge initiative designed to automate air defense control and reporting processes by digitizing them. It is **developed by Bharat Electronics Limited (BEL) as part of the 'Atmanirbhar**

Bharat' initiative. It aims to deliver an unprecedented level of situational awareness and control for the force to ensure the safety of friendly aircraft and engage hostile aircraft in contested airspace. It will **enable monitoring of low level airspace over the battle areas of Indian Army and effectively control the Ground Based Air Defence Weapon Systems.**

Sarang systems: It is an advanced Electronic Support Measure system for helicopters of the Indian Navy. It is **designed and developed indigenously by Defence Electronics Research Laboratory, Hyderabad under the programme Samudrika.**

2. World Craft City: Recently, **Srinagar has earned the World Craft City (WCC) tag from the World Crafts Council (WCC).** It is a **ground breaking initiative launched in 2014 by the World Crafts Council AISBL** (WCC-International) in recognition of the pivotal role local authorities, craftspeople, and communities play in cultural, economic, and social development worldwide. It establishes a dynamic network of craft cities across the globe, aligning with the principles of the creative economy. **Under the World Craft City Programme, Jaipur (Rajasthan), Mammalapuram (Tamil Nadu) and Mysore (Karnataka) have been added as craft cities from India.**

Some of the famous crafts from Srinagar
Papier-Mache: It **refers to the art of making an object from mashed and molded paper pulp**. The object so made is traditionally painted and usually covered with a layer of lacquer or varnish.
Pashmina: Shawls, Kani.
Sozni shawls: Sozni embroidery is one of such arts that have its origin into the geography of Kashmir. The word Sozni is a Persian derived word which means needle and sozankari, the needle work**. The person who performs this craft is called the sozankar.**

3. Javelin Anti-Tank Missile: It is a man-portable antitank guided missile (ATGM) system.

It is **developed and produced jointly by American defence majors Raytheon and Lockheed Martin.** It was designed to defeat heavily armored vehicles, such as main battle tanks and lighter-skinned military vehicles. The weapon also has capability against other target types, like fortifications, bunkers, and helicopters. **It uses "fire-and-forget" technology using automatic infrared guidance to guide itself to the target without external commands or target designation.** It is designed to be shoulder-fired but may alternatively be mounted on wheeled or tracked vehicles. It **can be used in direct attack mode to destroy a target or, if fired upwards, to shoot down a low-flying aircraft such as a helicopter.**

4. India's progress in nuclear energy: India's Nuclear Power generation capacity is to increase by around 70 percent in the next 5 years. Installed capacity of 7.48 GWe will become 13.08 GWe by 2029, which is over 70 percent increase with addition of 7 new Reactors single point approval to promote ease of science and promote ease of living for citizens by application of nuclear technology. **Bharat Small Modular Reactor (BSMR) 220 MW to use light water-based reactors by replacing Calandria by pressure vessel.**

27 JUNE

1. ALMA Telescope: It is a **state-of-the-art telescope** that studies celestial objects at millimetre and submillimetre wavelengths. It is **a radio telescope comprising 66 antennas located in the Atacama Desert of northern Chile.** They can penetrate through dust clouds and help astronomers examine dim and distant galaxies and stars out there. It also has extraordinary sensitivity, which allows it to detect even extremely faint radio signals. **The telescope consists of 66 high-precision antennas, spread over a distance of up to 16 km. It is operated under a partnership between the United States and 16 countries in Europe, Canada, Japan, South Korea, Taiwan and Chile.** The radio telescope was designed, planned and constructed by the

US's National Radio Astronomy Observatory (NRAO), the National Astronomical Observatory of Japan (NAOJ) and the European Southern Observatory (ESO).

2. Ambubachi Mela: It is an annual Hindu fair held at the historic Kamakhya Temple. It is **celebrated during the monsoon season that happens to fall during the Assamese month Ahaar**, around the middle of June. It is the **celebration of the yearly menstruation course of goddess Maa Kamakhya.**

Kamakhya temple: It is **situated on Nilachal Hill** and adjoining the southern bank of the Brahmaputra River in Guwahati, Assam. It is **one of the most revered centres of Tantric practices.** It is regarded as one of the oldest of the **51 Shakti Peethas in India.**

Temple Architecture: It had been modelled out of a combination of two different styles namely, the **traditional nagara or North Indian and Saracenic or Mughal style of architecture**. This combination has been named **the Nilachala Style of Architecture**. It consists of five chambers, garbhagrihaor sanctuary, antarala or vestibule, Jagan Mohan or principal chamber, bhogmandir or ritual chamber and natmandir or opera hall for performing traditional dance and music associated with sukti temples.

3. Innovations for Defence Excellence (iDEX): It is the **flagship initiative of the Union Ministry of Defence**. It aims to achieve self-reliance and foster innovation and technology development in Defence and Aerospace by engaging Industries including **MSMEs, start-ups, individual innovators, R&D institutes and academia**. It has partnered with leading incubators in the country to provide handholding, technical support and guidance to the winners of iDEX challenges.

Funding: iDEX will be funded and managed by a 'Defence Innovation Organization (DIO)' which has been formed as a 'not for profit companyas per Section 8 of the Companies Act 2013 by the two founder members, i.e. **Defence Public Sector Undertakings (DPSUs) - HAL &**

BEL. It **functions as the executive arm of DIO**, carrying out all the required activities, while DIO will provide high-level policy guidance to iDEX. Under iDEX, financial support is provided to Start-ups/MSMEs/individual innovators and Partner Incubators through DIO. It **has launched 11 editions of the Defence India Start-up Challenge and recently unveiled the Acing Development of Innovative Technologies with iDEX (ADITI) scheme** to promote innovations in critical and strategic defence technologies. It was the **recipient of Prime Minister Award for Public Policy in Innovation Category in 2021** and is currently engaged with over 400 start-ups and MSMEs.

28 JUNE

1. Space MAITRI Mission: Recently, **the Australian government entered into an $18 million memorandum of understanding (MoU) with NewSpace India Limited (NSIL), the commercial arm of the Indian Space Research Organisation (ISRO) under the space MAITRI mission**. Space MAITRI (Mission for Australia-India's Technology, Research and Innovation), represents a major step forward in the strategic partnership between the two nations in the space domain. It **aims to foster closer ties between commercial, institutional and governmental space organizations from India and Australia**. It focuses on debris management and sustainability, aligning with both nations' core values and objectives in promoting responsible space operations and mitigating the growing threat of space debris. Under this agreement, **NewSpace India Limited will launch Australia's Space Machines Company's second Optimus spacecraft in 2026**. The 450kg Optimus spacecraft, the largest Australian-designed and built spacecraft to date, will be launched on ISRO's Small Satellite Launch Vehicle (SSLV).

2. eSakhsya App: It is a mobile-based application to help police record the **scene of crime, search and seizure in a criminal case** and upload the file on the cloud-based platform.

Working: The **police official will have to upload a selfie** after the procedure is complete. Each recording could be a maximum four minutes long and several such files could be uploaded for each First Information Report (FIR). This **mobile application developed by the National Informatics Centre (NIC)** will be available to all police stations which register and download the App.

3. Exercise HOPEX: Recently, the Indian Air Force and Egyptian Air Force participated in the Exercise HOPEX 2024. It is the **fourth joint exercise of IAF (Indian Air Force) and EAF (Egyptian Air Force) which was held in Egypt.** The aim of this exercise is to **promote bilateral and regional cooperation**, which is a symbol of the long-standing relations between the two countries. **The Indian Air Force's (IAF) Rafale fighter jets are currently in Egypt for Ex-HOPEX. The C-17 Globemaster and IL-78 tankers are also participating in the weeklong exercise.**

India and Egypt relationship: Diplomatic relations between India and Egypt began on 18 August 1947 at the ambassadorial level. Both countries have cooperated closely on multilateral forums as founding members of the Non-Aligned Movement. **In the year 2022, India and Egypt celebrated the 75th anniversary of diplomatic relations, which reflects the depth of the relationship**.

4. Unified Registration Portal for GOBARdhan:
Launched: 2023.
Ministry: Ministry of Jal Shakti.
Objective: to streamline the registration of Compressed Bio-Gas and biogas plants nationwide.
This **portal acts as a data repository for different activities of Gobardhan.** It enables monitoring of the progress of the Programme. It **provides real-time tracking, ensuring transparency & and social accountability of the scheme.** According to the guidelines, Market Development Assistance of 1500 rupees per metric tonne will be granted for the sale of Fermented Organic Manure or Liquid Fermented Organic Manure, or phosphate-rich organic Manure produced at biogas and compressed biogas plants under the GOBARdhan initiative.

Eligibility: Anyone who operates or intends to set up a biogas/ CBG/ Bio CNG plant in India can obtain a registration number by registering in this unified registration portal. The registration number is required to avail of benefits/ support from other Ministries/ Departments.

Significance: The **GOBARdhan initiative will get a boost as these new guidelines will turbocharge the uptake of organic fertilizer produced from the plants**.

GOBAR-Dhan Scheme:
Launched: 2018.
Ministry: Ministry of Jal Shakti.
Objective: to augment the income of farmers by converting biodegradable waste into compressed biogas (CBG).
Galvanizing Organic Bio-Agro Resources (GOBAR)-Dhan was launched by the Government of India as a part of the biodegradable waste management component under the Swachh Bharat Mission-Gramin.

29 JUNE

1. ABHYAS: It is a High Speed Expendable Aerial Target (HEAT). It has been **designed by DRDO's Aeronautical Development Establishment, Bengaluru, and developed through Production Agencies - Hindustan Aeronautics Limited & Larsen & Toubro.** It offers a realistic threat scenario for weapon systems practice. This indigenous system is designed for autonomous flying with the help of an autopilot, a laptop-based Ground Control System for aircraft integration, pre-flight checks, and autonomous flight. It also has a feature to record data during flight for post-flight analysis. **The booster has been designed by Advanced Systems Laboratory and the navigation system by Research Centre Imarat.**

2. Bhuvan Panchayat geoportal 4.0: It is an **online geospatial data and services dissemination platform** to support integration and utilisation of space-based information into governance and research initiatives involving spatial planning up to Gram Panchayat level.

Developed by: This WebGIS platform **developed by NRSC, ISRO.**

It enables visual National Database for Emergency Management (NDEM) portal: It provides a comprehensive uniform, structured, multi-scale scale geospatial database for the entire country for situational assessment and effective decision-making during disasters/ emergency situations. It acts as a national level geo-portal to provide space-based information with the amalgamation of DSS tools and services of disaster forecasting organisations with value addition addressing all natural disasters in all phases of disasters for an effective Disaster Risk Reduction in the Country. It will **also act as a Disaster Recovery and Data Provider node for the Integrated Control Room for Emergency Response (ICR-ER) being established by MHA, New Delhi.**

3. Rhisotope Project: Recently, South African scientists injected radioactive material into live rhinoceros horns under the Rhisotope Project to curb poaching. It was **started in 2021 in South Africa. It aims to make the rhinoceros horns easier to detect at border posts and render them useless for human consumption**. The project involves inserting two tiny radioactive chips into the horns of 20 rhinos **The low-dose radioactive material is designed to be detectable by radiation sensors at international borders without harming the animals or the environment.** The radioactive material is expected to last five years on the horn, making it a more cost-effective solution than dehorning every 18 months. Additionally, the team sprayed 11,000 microdots on each treated horn for further identification. The team of scientists will take follow-up blood samples to ensure the rhinoceroses are effectively protected**. South Africa, home to the majority of the world's rhinos, has been battling a poaching crisis driven by demand from Asia, where rhino horns are used in traditional medicine.**

4. India's Bioeconomy recorded 12 times increase in last 10 years: Union **Minister Dr Jitendra Singh inaugurates the 'National Plant Computational Biology & Bioinformatics Facility' at National Institute of Plant Genome research (NIPGR) marking the Silver Jubilee celebrations of the Institute in New Delhi**. He also announced the release of 'ADVIKA', a new superior drought tolerant, climate smart chickpea variety, which is notified in the Gazette and available for widespread production. **India produces 74% of the global chickpea output and it can be a good source of foreign exchange earnings.**

PLACES IN NEWS

1. Senkaku Islands: Japan has spotted Chinese ships sailing near disputed Senkaku Islands in East China Sea.

About Senkaku Islands:
- Also known as **Diaoyu in Chinese**.
- Located approximately 170km northwest of Japan's Ishigaki Island/ Okinawa Prefecture, 170km northeast of Taiwan and 330km from mainland China coast.
- Comprises group of islands i.e. **Uotsuri Island (largest), Kuba Island, Taisho Island etc.**
- Senkaku Islands have long been a contentious issue between Japan and China.
- Both nations assert historical claims over uninhabited rocky chain.

2. Iraq (Capital: Baghdad): UNSC voted to end the United Nations Assistance Mission in Iraq (UNAMI) established in 2003 following the United States-led invasion. UNAMI was established to coordinate post-conflict humanitarian and reconstruction efforts, and to help restore a representative government in the country.

Political Features:
- **Territorial Boundaries:** Turkiye (north), Iran (east), Syria and Jordan (west), Saudi Arabia and Kuwait (South)
- **Maritime Boundaries:** Opens into Persian Gulf Geographical Features
- **Major Mountains:** Sinjar Mountains, Zagros Mountains (Northern Iraq, bordering Iran)
- **Rivers:** Tigris, Euphrates
- **Lakes:** Habbaniya, Razzaza or Lake Milh (man-made lake and it at the risk of drying up)

3. Siang Valley: Indian researchers have discovered a new blue-coloured ant species named Paraparatrechina neela in Siang Valley.

About Siang Valley:
- Lies primarily **in Arunachal Pradesh.**
- Brahmaputra River in Arunachal Pradesh is known as the Siang River.
- Part of the Eastern Himalaya Biodiversity Hotspot.
- Key Protected Areas in this valley includes **Mouling National Park and Daying Ering Wildlife Sanctuary**.
- **Tribal Groups:** Nyishi, Adi tribes etc.
- **Threat:** Large-scale infrastructure projects like dams, highways and military installations and climate change.

4. Slovenia (Capital: Ljubljana): Slovenia becomes latest European country to recognize a Palestinian state.
Political Features:
- Slovenia is a **country in central Europe**.
- **Land boundaries:** Austria (North), Hungary (far Northeast), Croatia (East, Southeast, and South), and Italy (West and South west).
- It has an important coastline along the Gulf of Venice (northern arm of the Adriatic Sea).

Geographical Features:
- Outside the coastal area, its terrain consists largely of **karstic plateaus and ridges, magnificently precipitous Alpine peaks, etc.**
- Two-fifths of Slovenia is covered by the Alpine region.
- **Major Rivers:** The Sava (a tributary of the Danube), Dravinija, etc. Highest point: Mount Triglav

5. Panama (Capital: Panama City): Panama becomes first nation to evacuate island community from Gardi Sugdub Island over climate change impact.

Political Features:
- **Location:** Country of Central America, located on the Isthmus of Panama.
- Isthmus of Panama is a narrow bridge of land that **connects North and South America.**
- **Territorial Boundaries:** Costa Rica (West) and Colombia (East).
- **Maritime Boundaries:** Caribbean Sea (North) and Pacific Ocean (South).

Geographical Features:
- **Major Rivers:** Río Chagres, Rio Chepo etc. Major Mountain Range: Cordillera Central (Central Mountain Range)
- **Highest Peak:** Barú Volcano

6. Lipulekh Pass:
- It is located close to the tri-junction of **India, China (Tibet) and Nepal** and is situated in Uttarakhand (Pithoragarh district).
- It is a **major pass of Kumaun region situated in Kali Valley.**
- It has been an ancient trade route used for centuries by traders, pilgrims, and travellers for cultural exchange.
- Traveling through Lipulekh Pass significantly reduces travel time for **Kailash Mansarovar Pilgrimage.**

7. Malawi (Capital: Lilongwe): Malawi Vice President was killed in a plane crash in the Chikangawa mountain range.

Political Features:
- It is a **landlocked country in southeastern Africa.**
- **Neighbouring countries:** Mozambique (East and South), Zambia (West), and Tanzania (North).

Geographical Features:
- **Relief:** 4 basic regions - Great African Rift Valley, central plateaus, the highlands, and the isolated mountains.
- **Major Lakes:** Lake Malawi and Lake Chilwa.
- **Major Rivers:** Rukuru, Dwangwa, Lilongwe, Bua, etc.
- **Major Ranges:** Mt. Mulanje, Mt. Nakodzwe, Mt. Dzole, Mt. Namasile, etc.
- **Highest Peak:** Sapitwa peak (in Mt. Mulanje)

8. Thailand (Capital: Bangkok): Thailand's senate has approved bill to legalize same-sex marriage.

Political features:
Located in the centre of mainland Southeast Asia.
Land Border: Myanmar (northwest), Cambodia (east), Laos (northeast) and Malaysia (south).
Water bodies: Andaman Sea and Gulf of Thailand.

Geographical features:
Highest mountain: Doi inthanon.
Major rivers: Mekong, Chao Phraya etc.
Climate: Tropical monsoon.
Natural resources: Tin, Rubber, Natural Gas, Tungsten, Tantalum, Timber etc.

9. Simlipal Tiger Reserve (STR)

Location: STR is located within the Mayurbhanj District, in the Northernmost part of Odisha.
It is surrounded by high plateaus and hills, the **highest peak being the twin peaks of Khairiburu and Meghashini (1515m above mean sea level).**
It was **declared a 'Tiger Reserve' in the year 1956** and included under the national conservation programme **'Project Tiger' in 1973.**
The **STR, along with a 'transitional area' of 2250 sq. km, was included as a part of the World Network of Biosphere Reserves by UNESCO in the year 2009.**
Terrain: The terrain is mostly undulating and hilly, interspersed with open grasslands and wooded areas.
Vegetation: It is a mix of different forest types and habitats, with Northern tropical moist deciduous dominating some semi-evergreen patches.
It is the **only landscape in the world that is home to melanistic tigers.**
The region around STR is home to a variety of tribes, including **Kolha, Santhala, Bhumija, Bhatudi, Gondas, Khadia, Mankadia and Sahara.**

Flora:
An astounding 1078 species of plants, including 94 species of orchids, are found here.
Sal is the dominant tree species here.
Fauna: Leopard, Gaur, Elephant, Langur, Barking and Spotted Deer, Sloth Bear Mongoose, Flying Squirrel, Porcupine, Turtle, Monitor Lizard, Python, Sambar, Pangolin etc.

10. Nord Stream:
Comprises a network of offshore pipelines (Nord Stream 1 and 2) supplying natural gas from Russia to northern Germany.
Pipelines pass through the territorial waters and/or **Exclusive Economic Zones of Russia, Finland, Sweden, Denmark and Germany.**

Impacts of Nord Stream's Leakage:

The high concentration of methane in water may have promoted the growth of methanotrophic bacteria.
This **bacteria uses methane as their sole source of carbon and energy**

11. Armenia (Capital: Yerevan)
Armenia has officially recognised Palestine as a State.

Political Boundaries
Location: Landlocked country of Transcaucasia (populated region to the south of the Caucasus Mountains).
Border: Azerbaijan, Turkey, Nakhchivan Autonomous Republic (an exclave of Azerbaijan), Georgia, and Iran.
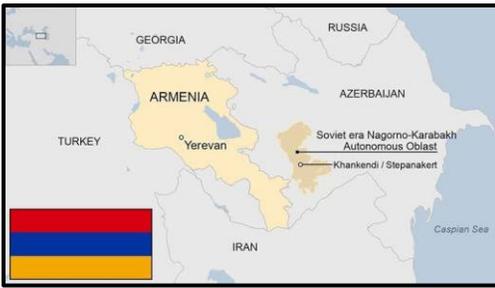
Nagorno-Karabakh is a disputed territory between Armenia and Azerbaijan.

Geographical features:
Topography: Mountainous terrain with no lowlands
Highest Peak: Mount Aragats (Alaghez)
Rivers: Aras River

12. Philippines (Capital: Manila):
Recently, Philippines Ambassador said that BrahMos missiles offer a "credible defense" for Southeast Asian country.

Political features
Island country of Southeast Asia in western Pacific Ocean.
Water bodies: Philippine Sea (east), Celebes Sea (south), Sulu Sea (southwest), and South China Sea (west and north).

Geographical features
Highest Point: Mount Apo.
Major Rivers: Cagayan River (Río Grande de Cagayán), Mindanao, Agusan etc.
Climate: Tropical and monsoonal.

13. Bannerghatta National Park:

Location: It is located near Bangalore, Karnataka, in the hills of the Anekal range.
It was **declared as a National Park in 1974.**
It is the **first biological park in India to have a fenced forested elephant sanctuary**.

In 2006, **India's first butterfly enclosure was inaugurated at the park.**
River: Suvarnamukhi stream, the main source of water for the animals of the park, runs through the centre of the park.
Vegetation: There are three types of vegetation that can be found: **Dry Deciduous Scrub Forests, Southern Tropical Dry Deciduous Forests and Southern Tropical Moist Mixed Forests.**
Flora: Include Narcissus latifolia, Schleichera oleosa, Sandalwood, Neem, Tamarind, Bamboo, Eucalyptus etc.
Fauna: Prime habitat for several species, including the endangered Asian Elephant, Indian gaur, Tiger, Sambar deer, Spotted deer, Leopard, Wild dog, Wild pig, Sloth bear, Common mongoose, Pangolin, Slender loris, Black-naped hare, etc.

14. Lake Natron: Climate impact is impacting Tanzania's Lake Natron.

About Lake Natron
It is the **only significant and regular breeding site for the East African population of Lesser Flamingo.**
Over 75 per cent of the world population of this species migrates each year to Lake Natron to breed.
It has a unique composition of warm waters and salt, caustic soda, and magnesite deposits **resulting in pH as high as 10.5**
It was **added to the Ramsar Convention on Wetlands List in 2001**.

Concern: agriculture, pollution, and climate change.

15. Pench Tiger Reserve

Location: Spread across states of Maharashtra and Madhya Pradesh in lower southern reaches of Satpura hills.
Background: Status of National Park in 1975, and Tiger Reserve in 1992.
Forest Types: South Indian Tropical Moist Deciduous, Southern Tropical Dry Deciduous Teak, and Southern Dry Mixed Deciduous.

Pench River divides it into two halves.
Flora: Mahua, White Kulu, Salai, Saja, Bijiyasal, Dhaora, Amaltas, etc.
Fauna: Tiger, leopard, sloth bear, Indian gaur, wild dog, wolf, etc.
It also **finds mention in Ain-i-Akbari** and it is the **original setting of Rudyard Kipling's most famous work, The Jungle Book.**

PRELIMS AND MAINS EDUBYTES

1. Why timely Monsoon is important?

India's economy is closely linked to the monsoon season because it **provides 70% of the rain needed to irrigate farms and replenish reservoirs and aquifers**. The monsoon season typically lasts from June to September, and large areas of western and central India receive more than 90% of their total annual precipitation during this period.

A good monsoon year can lead to increased agricultural production, which can boost India's GDP by 3%. A bumper harvest can also increase rural prosperity and demand for goods, while helping to calm prices as supplies improve.

(Source: Down to Earth)

2. State Best practices

In the last week of May the F**orest Department of J&K has used drones to extinguish forest fires in Reasi area.** This could be used in Himalayan region as the area becomes vulnerable to fire during dry season. (E.g. of best practices)

3. Census

1st census in India was conducted in **1872- Lord Mayo**

1st census for **entire India was conducted in 1881- Lord Ripon**

Need for Census

1. provides basic statistics on state of **human resources, demography, culture and economic structure at local, regional and national level.** Hence it is important for policy making and decision making.

2. Delimitation on constituencies depend on it.

3. **Women's reservation (106th amendment) will be effective only after census** and following delimitation.

4. Last census statistics is outdated as it was conducted in 2011.

4. Critical Minerals

India has **declared 30 minerals as critical mineral Economics of CMs-** The global Critical Minerals Market size was valued at USD 320.43 billion in 2022 and is projected to reach USD 494.23 billion by 2030, growing at a CAGR of 5.69% from 2023 to 2030.

Environmental Aspect- According to the International Energy Agency (IEA), demand for critical minerals is expected to increase fourfold by 2040 to meet climate goals.

Industry & Tech Aspect- Industries such as **high-tech electronics, telecommunications, transport, and defense** heavily rely on these minerals. Additionally, critical minerals are essential for green technologies like solar panels, wind turbines, batteries, and electric vehicles.

Issues that India is facing-

1. Supply Chain Risk
2. Limited Reserves in India.
3. Industry dominated by the Chinese.
4. Industry related to this minerals requires high Capex

5. Global Gender Gap index by WEF

India's Rank 129 out of 146.

Gender Gap Closure: India has closed 64.1% of its gender gap as of 2024. It means 35.9% gap is yet to addressed.

Issues faced by women:

1. One in every 10 women is living in extreme poverty (10.3 per cent)

2. Less likely to **have access to social protection**.

3. Less access to finances & resources.

4. **The digital divide remains a gendered one with 37 per cent of women** globally not using the internet.

5. Women are **over-represented in informal and vulnerable employment**.

6. Women are paid less than men and face various forms of physical and mental abuse at work.

7. Disproportionate share of unpaid care and domestic work.

If women are treated at par with men-

1. If women's unpaid work were assigned a monetary value, it would exceed up to 40 per cent of GDP in some countries.

2. Closing existing care policy gaps and expanding care services with decent care work could create almost 300 million jobs by 2035

Data-UN Women

6. Hallucination of AI

AI hallucinations are when an AI model generates incorrect or misleading information, but presents it as if it were true.

Can lead to-
   1. Infodemic,
   2. aid to indoctrination aspect of terror outfits,
   3. hate speech etc.

(Related to Internal Security part of Mains syllabus)

7. State of Global air-2024

Published by **Health Effects Institute, a US-based research organization**, in partnership with UNICEF Report released)

1. Globally, air pollution accounted for the 2nd largest risk factor of death (8.1 million deaths) in 2021, after High blood pressure.

2. **99% of the world's population lives in places with unhealthy levels of PM2.5 pollution.**

3. Populations from low and middle- income countries are exposed to 1.3-4 times higher levels of ambient PM2.5.

Health risks of Air pollution in India-

1. **India and China together accounted for 54% of the total global disease burden** linked to air pollution.

Nearly 50% of all ozone-related Chronic Obstructive Pulmonary Disorder (COPD) deaths were in India in 2021

Initiatives to Combat Air Pollution in India-
1. **National Clean Air Programme:** To Improve air quality in 131 cities (non-attainment cities and Million Plus Cities) in 24 States.
2. Leapfrogging from BS-IV to BS-VI fuel standards for the country,
3. **National Air Quality Index:** For dissemination of information to public about daily air quality.

8. Space Economy
India's share in global space economy to rise 4 times by 2030 in comparison to 2021- Minister of State for Science & Technology.
In **2023, size of India's space economy- $8.4 billion with a 2-3% global share & will rise to 15% by 2047.**

Steps taken in Space Sector-
1. Indian 2023 Space Policy encourages **enables end-to- end participation of private entities in all domains.**
2. IN-SPACE an independent nodal agency under **Department of Space for allowing space activities.**
3. NSIL New Space India Limited to promote private sector participation.
4. Space Start-ups- 1 in 2022. Now 200.
5. Presently, **100% FDI is allowed in the space sector.**

Concerns
1. Space spending as a percentage of GDP remains relatively low.
2. India only spends 0.04% of its GDP on space, whereas United States spends 0.28%.
3. Dearth for trained personnel to meet the demands of an expanding space program.
4. Absence of clear national space legislation, which leads to a lack of clarity.

9. India and Gulf Relations
Gulf region became integral part of India's Extended neighbourhood

Strategic convergence in interest
Economic: The Gulf Cooperation Council (GCC) is India's largest regional bloc trading partner.
Security: 55.3% of India's total crude oil in 2022-23 from the Gulf region
Regional geo-economic and connectivity focus: Engagement in various groups like I2U2 (India, Israel, United Arab Emirates, United States), India-Middle East-Europe Economic Corridor (IMEC), etc.
Defence and security cooperation: Such as securing maritime lines of communication from pirates.
Welfare of Indian diaspora: More than 8 million Indians (or people of Indian origin) working in and around this region.

Challenges
1. Hamas-Israel war and the Red Sea attacks on Indian ships by Yemen's houthis.
2. Growing engagement of Gulf countries with China.

10. Custodial Death

1. There were more than **660 Custodial deaths in the country from 2017 to 2022.**
2. **Gujarat has reported the highest number of Custodial deaths** (80) followed by Maharashtra.
(Source- National Crime Records Bureau)

Constitutional Safeguards against
1. **Article 14** (Right to equality before law)
2. **Article 21** (Right to life)

Legal Safeguards
1. **Sec 330 & 331 of IPC** provides punishment for injury inflicted for extorting confession during custody
2. **Section 176 Cr.P.C**, calls for magisterial enquiry in case of custodial death.
3. The upcoming New Criminal Laws also contain provisions like- **Sec 120, Sec 127 of Bhartiya Nyaya Sanhita on safeguarding the accused.**

Challenges in curbing Custodial death
1. Non-ratification of UN Convention against torture, 1997
2. Absence of a **National level anti-torture framework**
3. Lengthy judicial proceedings
4. Tremendous pressure on the police to detect cases whenever there is a surge in crime, and particularly heinous crime.

11. Judgements related to reservation
1. **Indra Sawhney Case (1992):** Sets the limit for reservation as 50%. It also nullified the provision of reservation in promotions and the concept of 'Creamy layer' was introduced.
2. **M. Nagaraj Case (2006):** Affirmative action should be only to such an extent as not to compromise efficiency in administration.

3**. Jarnail Singh Case (2018):** Reservation in promotions does not require the state to collect quantifiable data on the backwardness of the SCs and the STs.
4. **Janhit Abhiyan case (2022):** Upheld the validity of 103rd Constitutional amendment for providing EWS reservation (10%).

12. "Cyber Mercenaries"
Cyber mercenaries are described as a **person, group of persons, or private actors that are hired to carry out cyber offensive or defensive operations to take action on particular cyber networks and infrastructure**.
These enable spying on networks, computers, phones, or devices connected by the internet.
Examples of cyber mercenaries include **Lazarus, Ocean Lotus group, NSO group etc.**
They work as a business house and provide various services against payment. It **enables terror organization without high end cyber capabilities** to hire these organizations/individual and carry out strikes in lieu of payment.
Challenges- Use of cyber mercenaries is considered as a 'grey-zone' activity due to absence of agreed international conventions regulating the domain.

13. Deeptech Industry
Deep Tech startups leverage advanced technologies like Al, IoT, Blockchain, and AR/VR to create novel solutions for complex problems, often combining multiple technologies to redefine or create new markets. Ex: Agnikul, GalaxyEye, Garvam Al

Stats
India currently has **3600+ DeepTech startups.**
Indian DeepTech startups have raised a cumulative $10 Bn in the last 5 years (2023-2019).

Concerns

1. Despite having the 3rd largest pool of Deep Tech startups, **India ranked 6th among the top 9 Deep Tech ecosystems in the world.**

2. In 2023, **witnessed 77% decline in funding compared to 2022**

3. During the pre-commercialization phase, lacks access to the necessary infrastructure.

4. Limited understanding of business operations and market dynamics.

5. Competition from large enterprises for adequately skilled talent

Initiatives taken

1. Draft National Deep Tech Startup Policy (2023)

2. Technology Incubation and Development of Entrepreneurs (TIDE 2.0)

3. Startup India Seed Fund, India Al Mission etc.

BASIC USE CASES FOR DEEP TECH

14. Best Practices

Example of technology revolutionising administration & increasing transparency

e-**SAKSHI Portal**-eSAKSHI portal is an **end-to-end solution for efficient and transparent implementation of the MPLAD scheme.**

Features

1. It allows MPs to **propose, track, and oversee the projects at their fingertips.** This **real-time access enhances decision-making processes**

2. Enabling swift responses to emerging needs or issues.

3. The application will **streamline the communication between MPs and relevant authorities.**

4. Promotes transparency by providing MPs with instant updates on the status and progress of their proposed projects.

5. Features for **budget management, ensuring MPs can monitor expenditures**.

15. Growing Internet user base

In January this year, there were 751 million internet users (up from 65 million in 2014), at a penetration rate of 52.4 percent of the total population. It is expected to grow to 900 million by 2025.

Significance

1. Boost to creators' economy.

2. Increased access to health. **Eg- Telemedicines**

3. Enhancing service delivery**. Eg- Arogya Setu app usage in covid.**

4. Financial Inclusion & EoDB**. Eg- Paytm, BHIM UPI**

5. Easy access to educational content and upskilling through internet. E.g- Udemy Platform

Concerns

1. Nearly half of the population is still out of the ambit

2. Digital illiteracy. Leading to cyber frauds.

3. Doom scrolling

4. Infodemic

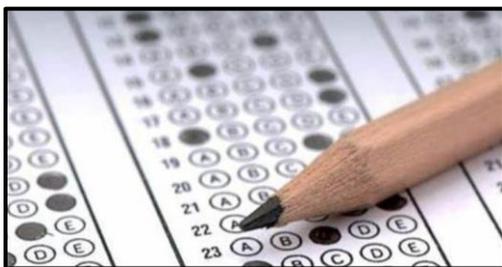## 16. Current clout on exams & Suggestions

Significance of a fair exam

1. Exams in India are a social equalizer.

2. Can removes backwardness of generations.

3. It relates to aspirations of the youth.

4. Improves economic condition

Recommendations to bring transparency
1. implementing cutting-edge encryption techniques and multi-factor authentication
2. Blockchain technology to track and secure examination papers from creation to evaluation & ensuring that any tampering is immediately detectable.
3. Updated SOPs & stringent security measures are vital at every stage. This includes tamper-evident packaging for examination materials, secure transportation, and rigorous checks at all handling points.
4. Employing real-time GPS tracking for logistics and using digital watermarking can also significantly reduce the risk of leaks.
5. Biometric verification can ensure that candidates.

17. Schemes related to women
1. **Mission Shakti**- Mission Shakti comprises of two sub-schemes 'Sambal' and 'Samarthya' for safety and security of women and the empowerment of women respectively.
2. **Pradhan Mantri Matru Vandana Yojana-** The Scheme envisages providing a cash incentive amounting to Rs. 5,000/- in two installments directly to the Bank/Post Office Account of Pregnant Women and Lactating Mothers (PW & LM) in Direct Benefit Transfer (DBT) Mode during pregnancy and lactation.
3. **One-Stop Centres**- For women affected by violence and in need of assistance, a range of integrated services is being provided under one roof, including facilitation with police, medical and legal aid and counselling and psycho-social counselling through One-Stop Centers or Sakhi Centers across States/UTs.

4. **Mahila Shakti Kendra (MSK):** The MSK is a centrally sponsored scheme to empower rural women through community participation. The aims to facilitate inter-sectoral convergence of schemes and programs meant for women.

18. Water Credit
A market-based mechanism similar to carbon credits, which incentivises water conservation and quality improvement. credits. Individuals and entities can earn tradable. These credits can then be sold to others needing to offset their water usage.
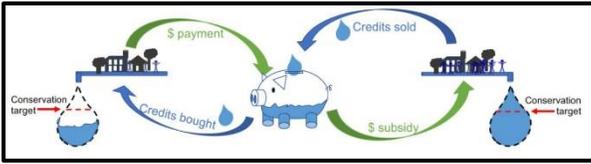
Significance
1. Help in achieving SDG6 (Clean Water and Sanitation).
2. In India, 11 out 15 major river basins will be water-stressed by 2025.
3. Enhance water use efficiency in agriculture, which is the largest extractor of groundwater.
4. Promote and foster investment in sustainable water management practices.

Associated Challenges
1. Unlike carbon emissions, water savings require localized approach, factoring in rainfall and consumption at a watershed level.
2. Spatial limitation for transactions as they are confined to hydrological boundaries.
3. Preventing wealthier entities from dominating the market.

Best Practices- Water is traded on markets in Murray-Darling basin in Australia, which helped farmers make more productive use of water.

19. Rooftop solar System
India has installed only 7.5GW of solar Rooftop system by 2022 against the target of 40GW.

Importance of Solar Power
1. Environment Friendly
2. Positions India as a global leader in transformation.
3. Employment & Growth of Industry

Related Scheme- The Pradhan Mantri Surya Ghar Muft Bijli Yojana to fit one crore households with Rooftop Solar systems and help them get up to 300 units of free electricity every month.

Importance of the Scheme
1. Lessens the electricity bill burden of a household so that resources can be diverted to human capacity development.
2. Helps in achieving Solar rooftop power target.

Way Forward
1. Creating awareness is key to getting consumers on board.
2. RTS needs to be economically viable for households.
3. Low-cost financing options are required.
4. Promoting R&D in solar technology, energy storage solutions
5. Investments in training programmes, (like the 'Suryamitra' solar PV technician programme initiated in 2015).

20. Dark Web

It generally uses non-standard communication. protocols which make it inaccessible to internet service providers (ISPs) or government authorities.

Content on DarkNet is encrypted and requires a specific browser such as TOR (The Onion Ring) browser to access those pages.
It is a part of the Deep Web which includes sites that are protected by passwords (refer to the infographic) Part of the internet that is readily available to the general public and searchable on standard search engines is called as Surface Web.
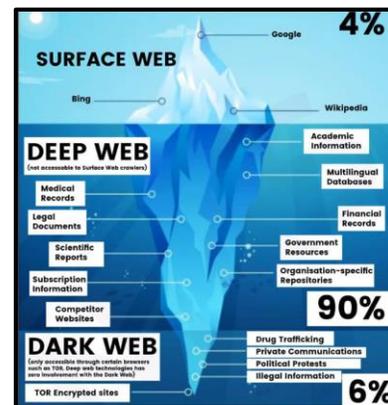
Applications
1. Journalists and citizens working in oppressive regimes (to communicate without any government censorship)
2. Researchers and students to do research on sensitive topics
3. Law enforcement agencies etc.

Concerns:
1. Due to anonymity it facilitates illicit activity, drug dealing, child pornography, etc.
2. communication by terrorists
3. Black Marketing
It is alleged that recently cancelled NEET papers were traded in Dark Web

21. Electronic Industry
Electronics production is expected to grow from USD 102 billion in 2023 to USD 500 billion by 2030(Confederation of Indian Industry).
China accounts for 62% of India's electronic component imports.

Major domains components/sub-assemblies-**batteries (lithium-ion), displays and Printed Circuit Board.**
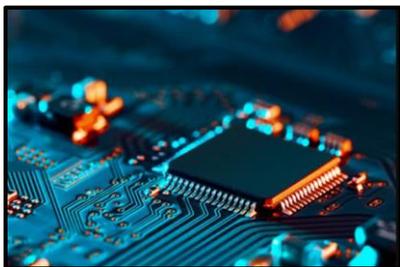
Opportunities
1. To become a global hub.
2. Reap dividend of young work force.
3. Reducing imports
4. Stabilise the supply chain
5. Electronics is essential in every tech domain.

Challenges
1. Higher import tariffs
2. Requires high initial cost
3. High energy and clean water requirement.
4. Low R&D.
5. Criticality of supply chain.

Government initiatives
1. The Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing, IT Hardware,etc.
2. Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS).
3. Modified Electronics Manufacturing Clusters Scheme (EMC 2.0).
4. National Policy on Electronics 2019.

KEY ANNOUNCEMENTS

Chief Minister Majhi Ladki Bahin Yojana
₹1,500 in bank accounts of eligible women in 21-60 age group every month beginning July 2024

Free higher education for girls
Govt to reimburse 100% tuition, exam fees to girls from OBC, EWS categories with annual family income of up to ₹8 lakh

Chief Minister Annapurna Yojana
Three LPG cylinders free of cost to a family in a year

Chief Minister Yuva Karya Prashikshan Yojana
₹10,000 monthly stipend to 10 lakh interns

Chief Minister Baliraja Vij Savlat Yojana
Govt to waive electricity bills for agri pumps for 44.06 lakh farmers

22.

Ladli Bahin' scheme of Maharashtra can be used in women empowerment related topics

23. MSME
Globally, MSMEs account for 90% of businesses, 60 to 70% of employment, and 50% of GDP.
In India, share of MSME GVA in all India GDP stands at 29.1% (2021-22) with its share in export amounting to 43.59% (2022-23).

Significance
1. GDP Contribution and Employment Generation.
2. Contribution to Manufacturing Output
3. Export Promotion
4. Check Rural Unemployment
5. Innovation and Entrepreneurship
6. MSMEs are important in the implementation of SDG 8 (decent work and economic growth) and SDG 9 (industry, innovation and infrastructure).

Challenges
1. Lack of access to finance: commercial banks fulfills only 16% of credit demand.
2. Delayed Payments
3. Limited Skilled Workforce
4. Limited Branding and Outreach
5. Infrastructure Constraints

Definition of Micro, Small and Medium Enterprises			
Parameters	Micro	Small	Medium
Investment in Plant and Machinery	≤1 Crore INR	≤10 Crore INR	≤ 50 Crore INR
Annual Turnover	≤5 Crore INR	≤50 Crore INR	≤ 250 Crore INR

Initiatives by Govt
1. Pradhan Mantri Mudra Yojna,
2. Priority Sector Lending for MSMES
3. Udyam Registration
4. CHAMPIONS Portal
5. RAMP Scheme

24. Example of fiscal mismanagement
PUBLIC WORKS Department (PWD) officials in Mumbai gave a total of Rs 26 crore to private

contractors, for maintenance and repair work done at official bungalows allotted to Maharashtra's ministers, from funds released solely to pay water and power bills at these residences — an alleged diversion that violated norms, and bypassed several checks and balances, records investigated by Indian Express.

EDUFACTS

3RD JUNE

1. While **India accounts for nearly 80% of Asia's and 20% of global millet production**, the acreage and production of millets have stagnated over the years (RBI annual report 2023-2024).

2. As per data released by Department for Promotion of Industry and Internal Trade (DPIIT), **FDI inflows in 2023-24 contracts by 3.49% to $44.42 billion as compared with 2022-23.**

4 JUNE

1. ICRIER Releases Policy Brief on Post-Harvest Losses (PHL) in India:

Key highlights:
- **Production in India Food Grain:** Increased from 74.23 million metric tonnes (MMT) in 1966-67 to 330.5 MMT in 2022-23.
- **Horticulture:** Increased from 96.6 MMT in 1991-92 to 355.25 MMT in 2022-23.
- **India's Storage capacity:** Expanded from 108.8 MMT in 2010 to 219.4 MMT in 2021
- **PHL:** Globally, around 30% of food produced never reaches consumers (FAO, 2021).
- India faces higher PHL in cereals, pulses, and oilseeds than global levels.
- Annual loss of US $18.5 billion from 2020 to 2022, despite some reduction in PHL from 2012 to 2022.

5 JUNE

1. As per National Commission on Floods, around **39.58% of total land area of Assam is flood-prone area. Factors behind frequent floods in Assam**

2. **High-income economies with just 16.4 % of world's population** accounted for 46 % of the global GDP. On the other hand, **low-income economies (8.4 % of world's population) accounted for just 1 % of global GDP**

7 JUNE

1. **Election of 74 women to 18th Lok Sabha (LS) is a slight dip in women representation** as 78 women were elected to 17th LS (14.4% representation).

2. India has largest area under groundwater irrigation in world. As per **Dynamic Groundwater Resource assessment 2022, 14% of assessed units are overexploited and 4% are critical.**

8 JUNE

1. Prevalence of misinformation in political campaigns is a global trend. E.g., **Around 50,000 fake news posts were published and shared over 2 million times in India during 2019 general elections.**

2. **Education and Climate Change:** 50% of 100 countries in recent UNESCO survey have no mention of climate change in their curriculum. Around 70% of young people could not explain climate disruption.

9 JUNE

1. The average estimated Monthly Per Capita Consumption Expenditure (MPCE) in 2022-23 is observed to be Rs. 3,773 in rural India and Rs. 6,459 in urban India. **Share of expenditure on food in rural India was 46% and in urban India was 39%.**

2. **UNICEF releases "Child Nutrition Report, 2024":** Key findings Prevalence: ~27% children live in severe CFP, globally. In India, 40% of children suffer from severe CFP (2nd highest burden in South Asia after Afghanistan).

12 JUNE

1. State of World Fisheries and Aquaculture 2024 report released:

Key findings of the report:

- World fisheries and aquaculture production hit a new high in 2022 at 223.2 million tonnes.
- With 8 percent of total production, **India ranked second in aquatic animals production.**
- For the First time, aquaculture surpassed capture fisheries as the main producer of aquaticanimals.
- With 1.9 million tonnes, India ranked first in Inland fisheries production

13 JUNE

1. **An average of 5.6 billion tonnes of CO2** equivalent was emitted from tropical deforestation per year between 2019 and 2023 for top 20 countries.

2. Urbanization alone has led to an **overall 60% enhancement in warming in Indian cities**, with eastern Tier-II cities leading the way.

20 JUNE

1. **Women Workforce in Agriculture Sector**
Status: Agriculture employs about 80% of rural women (NITI Aayog).
Ownership: The percentage of female operational holdings has increased from 12.78 percent during 2010-11 to 13.78 percent during 2015-16.

21 JUNE

1. Clean energy infrastructure investments reached $1.8 trillion in 2023, with nearly 90% of the growth since 2021 occurring in **advanced economies and China**.

24 JUNE

1. **Agriculture and allied sector accounted for 18.2% of the Gross Value Added (GVA)** at current prices in 2022-23. Share of various sub-sectors are Crop (54.3%), Livestock (30.9%), Forestry (7.9%), and Fishing and aquaculture (6.9%).

2. Despite having the 3rd largest pool of DeepTech startups, **India ranked 6th among the top 9 DeepTech ecosystems in the world.**

25 JUNE

1. Around **70% of ammonia is used for fertilizers**; the rest is used for industrial applications, including **plastics, explosives, and synthetic fibres.**

2. **Bangladesh is India's biggest trade partner in South Asia** and India is the second biggest trade partner of Bangladesh in Asia.

26 JUNE

1. India is highly dependent on imported fuel – crude oil and natural gas, 82% and 45% of total requirement.

2. In India, **construction of toilets decreased girls' dropout rate by 12% points and that of boys by 11% points.**

27 JUNE

1. In India, **~4.63% of Coronary Heart Disease deaths are attributable to TFA intake**. WHO's recommendation for adults is to limit consumption of trans fat to less than 1% of total energy intake.

2. Boosting ST representation through PESA led to average increase of tree canopy by 3% per year and reduced deforestation.

28 JUNE

1. China accounts for 62% of India's electronic component imports.

2. In the decade to 2022, the number of people using illicit drugs increased to 292 million.

29 JUNE

1. Scheduled commercial banks Gross NPAs (GNPAs) and Net NPA ratios fell to multi-year lows of 2.8% and 0.6% respectively at March-end 2024.

2. In India, share of MSME Gross Value Added (GVA) in all India GDP stands at 29.1% (2021-22) with its share in export amounting to 43.59% (2022-23).