

THE IAS GAZETTE

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Academy for Civil Services Pvt. Ltd.
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1. POLITY & GOVERNANCE

1.1 FINANCES OF PANCHAYATI RAJ INSTITUTIONS

Context

- The RBI report on "Finances of Panchayati Raj Institutions" strongly emphasizes the need to financially empower Panchayats, India's rural governing bodies, as a crucial step towards achieving sustainable rural development.

Key Highlights of the Report

Challenges faced by Panchayats

- **Limited revenue sources:** Panchayats primarily rely on grants from central and state governments, with limited income generated from property taxes, fees, and fines. This makes them heavily dependent on external funding and hinders their ability to plan and execute local development initiatives.
- **Inefficient resource utilization:** The report highlights concerns about the efficiency of Panchayat expenditure, with suggestions for improvement in financial management practices.
- **Lack of capacity building:** Panchayat officials often lack the necessary training and skills to effectively manage finances and implement development projects.

Recommendations for financial empowerment

- **Augmenting own revenue sources:** The report encourages Panchayats to explore innovative ways to generate their revenue, such as through user charges, partnerships, and better property tax collection.
- **Timely devolution of funds:** The report emphasizes the importance of timely and predictable devolution of funds from central and state governments to Panchayats, ensuring they have adequate resources for planning and execution.
- **Strengthening financial management:** The report recommends capacity-building initiatives for Panchayat officials to improve financial management practices, budgeting, and accounting.

- **Promoting transparency and accountability:** Increased transparency and accountability in financial matters can help build public trust and encourage wider participation in local governance.

Panchayati Raj Institutions (PRIs) in India

- **Constitutional Framework:** PRIs were introduced through the 73rd Amendment Act of 1992, which added Part IX to the Indian Constitution. This amendment provided constitutional status to PRIs and aimed at decentralizing power and promoting local self-governance.
- **Three-Tier Structure:** PRIs operate in a three-tier structure at the village, block (intermediate), and district levels. The three levels are Gram Panchayat, Panchayat Samiti, and Zila Parishad, respectively.
- **Elections and Representation:** PRIs conduct regular elections for members at all three levels. The elections are held for various positions, including the Sarpanch, Panchayat members, and members of Panchayat Samiti and Zila Parishad.
- **Reservation:** The 73rd Amendment Act mandates reservations for Scheduled Castes (SCs), Scheduled Tribes (STs), and women in Panchayati Raj Institutions to ensure adequate representation and inclusivity.
- **Functions and Powers:** PRIs have been assigned various functions, including local governance, rural development, implementation of government schemes, collection of local taxes, and provision of essential services such as education, health, and sanitation.
- **Finance:** PRIs have limited financial autonomy and are dependent on grants from higher levels of government. The State Finance Commissions recommend the sharing of finances between the state government and PRIs.

PRIs receive funds in the following ways:

- **Grants from the Union Government based on the recommendations of the Central Finance Commission as per Article 280 of the Constitution.** These grants are meant to augment the consolidated funds of the States for supplementing the resources of PRIs. The 15th Finance Commission has recommended Rs. 2.36 lakh crore as grants to PRIs for the period 2020-21 to 2025-26, which is a fivefold increase from the previous period.
- **Devolution from the State Government based on the recommendations of the State Finance Commission as per Article 243 I.** These devolutions are meant to ensure that PRIs have adequate resources to perform their functions as per the 11th Schedule of the Constitution, which lists 29 subjects under their ambit. The devolution formula varies across States and depends on factors such as population, area, backwardness, performance, etc.
- **Own revenues from property taxes, fees, fines, user charges, etc.** These revenues are collected by PRIs themselves and are subject to their discretion and capacity. However, its revenues constitute a very small share of PRI finances, as they face constraints in levying and collecting taxes and charges.

What is the role of PRIs in economic development?

- PRIs play a **vital role in promoting economic development at the grassroots level by providing essential public goods and services** such as roads, water supply, sanitation, education, health care, etc. These services not only improve the quality of life of rural people but also enhance their productivity and income.
- PRIs **facilitate participatory democracy and empowerment of local communities** by involving them in planning, implementation and monitoring of development programmes. They ensure accountability and transparency of public funds by adhering to social audit and grievance redressal mechanisms.
- PRIs **foster social harmony and inclusion by ensuring the representation and participation of marginalized groups** such as women, Scheduled Castes, Scheduled Tribes and other backward classes.

Challenges for PRI finances

- **Low own revenues:** PRIs have limited powers and incentives to mobilize their revenues from taxes and charges. They also lack adequate infrastructure and manpower to assess and collect revenues efficiently. As a result, they depend heavily on grants and devolutions from higher levels of government, which may affect their autonomy and accountability.
- **Inadequate devolution:** Although States are constitutionally mandated to devolve funds, functions and functionaries to PRIs as per the recommendations of State Finance Commissions, many States do not comply with this obligation fully and timely. Moreover, the devolution formulae are often not transparent and rational, leading to horizontal and vertical imbalances among PRIs.
- **Poor utilization and management:** PRIs often face difficulties in utilizing and managing the funds received from various sources due to lack of capacity, coordination, monitoring and evaluation. There are also issues of delays, leakages, misappropriation and corruption in the flow and use of funds.



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Way forward to improve the financial performance and effectiveness of PRIs

- **Enhance own revenues:** PRIs should be empowered and incentivized to levy and collect more own revenues from property taxes, fees, fines, user charges, etc. They should also be provided with adequate infrastructure and manpower to assess and collect revenues efficiently. They should also adopt innovative methods such as GIS-based mapping, online payment systems, etc.
- **Ensure adequate devolution:** States should comply with the constitutional obligation to devolve funds, functions and functionaries to PRIs as per the recommendations of State Finance Commissions. They should also adopt transparent and rational devolution formulae that take into account the needs, capacities and performance of PRIs. They should also ensure timely and regular release of funds to PRIs.

- **Improve utilization and management:** PRIs should enhance their capacity, coordination, monitoring and evaluation to utilize and manage the funds received from various sources effectively. They should also adhere to social audit and grievance redressal mechanisms to ensure accountability and transparency of public funds. They should also adopt digital platforms such as PFMS, eGramSwaraj, etc.

Conclusion

- PRIs are the backbone of rural governance and development in India. They have a crucial role in delivering public services and implementing development schemes at the local level. They also have a significant impact on the economic and social well-being of rural people. Therefore, it is imperative to strengthen their finances by enhancing their revenues, ensuring adequate devolution and improving their utilization and management.

1.2 UTTARAKHAND'S DRAFT OF THE UNIFORM CIVIL CODE

Context

- The Uniform Civil Code (UCC) Bill passed in Uttarakhand aims to establish a common set of laws governing marriage, divorce, inheritance, and live-in relationships for all citizens, irrespective of their religion.

Key changes and implications of the Uttarakhand Uniform Civil Code

Marriage

- Sets a uniform age of marriage at 21 for men and 18 for women.
- **Enforces monogamy, prohibiting polygamy and bigamy.**
- Mandates compulsory registration of all marriages after enactment.
- Allows religious ceremonies alongside legal registration.

Divorce

- Outlines specific grounds for divorce, including adultery, cruelty, desertion, religious conversion, mental illness, etc.

- Ensures equal rights for men and women in divorce proceedings.
- Makes practices like halala, iddat, and triple talaq punishable offenses.
- **Grants initial custody of children under 5 to the mother** in case of divorce or dispute.

Inheritance

- Guarantees equal property rights for sons and daughters, regardless of class.
- Includes adopted, illegitimate, surrogacy, and Assisted Reproductive Technology (ART) children as biological heirs.
- Provides a clear order of inheritance in cases of intestacy, including spouses, children, and parents.
- Disqualifies inheritance for specific reasons like murder or remarriage before death.

Live-in relationships

- **Requires registration of live-in relationships** within the state.
- Allows for termination by submitting a statement.

- Grants deserted women the right to claim maintenance.
- Consider children born from such relationships legitimate.

Exemptions and Potential Debates

- **Exempts the tribal community** from the law's purview.
- Claims not to interfere with established religious customs, but the impact on specific practices remains to be seen.
- Potential criticism regarding compatibility with secular principles and potential impact on minority communities.

What is the Uniform Civil Code and why is it important for India?

- UCC is a **proposed legal framework that would codify and apply a set of uniform laws related to personal matters** such as marriage, divorce, adoption, and inheritance to **all citizens, regardless of their religion.**
- **Currently, the personal laws of various communities are governed by their religious scriptures.** For example, Muslims follow the Shariat law, Hindus follow the Hindu Succession Act, Christians follow the Indian Christian Marriage Act, and so on.
- The idea of UCC is **based on the principle of secularism and equality before the law.** It

aims to **promote national integration and gender justice**, by ensuring that all citizens have the same rights and obligations under the law. It also seeks to **simplify the legal system and reduce litigation** by removing the complexities and contradictions of different personal laws.

What is the constitutional basis of UCC?

- The **constitutional basis of UCC can be traced to Article 44 of the Directive Principles of State Policy (DPSP)**, which states: "The State shall endeavour to secure for the citizens a uniform civil code throughout the territory of India."
- **DPSP are guidelines for the state to follow while framing policies and laws.** They are not legally enforceable, but they reflect the ideals and aspirations of the Constitution. Article 37 of the constitution clarifies that DPSPs are "fundamental in the governance of the country" and it is the duty of the state to apply them.
- Dr. B.R. Ambedkar, the chief architect of the constitution, argued that UCC was necessary to overcome the inequalities and injustices that were prevalent in the personal laws of different communities.

Arguments in favor of UCC

- It will **ensure equality and justice for all citizens**, especially women, who suffer from discrimination and oppression under various personal laws. For instance, Muslim women do not have equal rights in matters of divorce, inheritance, maintenance, etc., as compared to Hindu women.
- It will **promote national integration and social cohesion by reducing communal tensions and conflicts arising from different personal laws.** For instance, inter-religious marriages often face legal hurdles and social backlash due to incompatible personal laws.
- It will **simplify the legal system and reduce litigation by removing the ambiguities and anomalies of different personal laws.** For instance, there are cases where people change their religion to take advantage of favourable personal laws or escape unfavourable ones.
- It will **uphold the secular character of the Indian state by separating religion from law.** It will also fulfill the constitutional mandate of Article 44 and honour the international obligations under various human rights treaties.

Arguments against UCC

- It will violate the fundamental right to freedom of religion guaranteed by Articles 25-28 of the Constitution. It will also infringe upon the cultural diversity and pluralism of India by imposing a uniform law on diverse communities.
- It will create resentment and resistance among religious minorities who fear that UCC will be dominated by majoritarian interests and values. It will also undermine their identity and autonomy in matters of personal faith and customs.
- It will be impractical and difficult to implement due to the lack of consensus and consultation among various stakeholders. It will also require a massive overhaul of the existing legal system and infrastructure.
- It will divert the attention from the more pressing issues of socio-economic development and governance. It will also politicize the issue and create communal polarization and violence.

Challenges to implementing UCC

- **Lack of political will and consensus among various parties and leaders.** UCC is often used as a political tool to garner votes or appease certain sections of society.
- **Lack of social awareness and acceptance among various communities and groups.** UCC is often perceived as a threat to religious freedom and cultural identity.
- **Lack of legal clarity and uniformity among various personal laws.** UCC is often faced with legal complexities and contradictions.
- **Lack of administrative capacity and resources to enforce UCC.** UCC is often hampered by practical difficulties and logistical issues.

Way forward for implementing UCC

- **Prioritize UCC as a national interest rather than a partisan agenda.** Encourage political leaders and parties to engage in constructive dialogue to find common ground. Building consensus among various political entities is crucial for the successful implementation of UCC.
- **Create awareness campaigns to inform and educate the public about the benefits of UCC.** Emphasize that UCC is designed to bring equality, justice, and simplicity to the legal system. Foster acceptance among different communities by highlighting the inclusive nature of UCC and how it aims to promote social harmony.
- **Develop UCC based on common principles and values that uphold constitutional ideals.** Ensure that the code is clear, consistent, and fair, addressing the concerns and interests of

diverse communities. Legal experts and scholars can play a crucial role in drafting a comprehensive and balanced UCC.

- **Strengthen the administrative infrastructure and allocate resources to effectively implement and enforce the UCC.** This includes training personnel, establishing mechanisms for registration and compliance, and creating awareness among legal professionals. Adequate administrative support is essential for the successful rollout of the UCC.
- **Involve stakeholders from different communities in the process of drafting and implementing the UCC.** Seek input from religious leaders, community representatives, and legal experts to ensure a holistic and inclusive approach. This can help address concerns and build a sense of ownership and acceptance among diverse groups.
- **Consider a phased implementation approach to ease the transition and allow for adjustments.** Gradual implementation can provide time for communities to adapt and understand the implications of the UCC, minimizing potential resistance.

Conclusion

- UCC is a long-standing constitutional aspiration that has been debated for decades in India. It has both merits and demerits, depending on one's perspective and position. The ultimate aim of UCC should be to achieve justice, equality, dignity, and harmony for all citizens, without compromising their religious

freedom, cultural diversity, or personal choice.
The best way to achieve this aim is through

gradual change, progressive reform, inclusive
consultation, and respectful dialogue.

1.3 INTERNET SHUTDOWNS

Context

- The Supreme Court's mandate directly requires the publication of orders by the Review Committee overseeing internet shutdowns in Jammu and Kashmir, which is viewed as a positive step for civil society in promoting transparency regarding such shutdowns.

Internet Shutdowns in India

- India is the world's largest democracy, but also the world's leader in internet shutdowns. An internet shutdown is a **deliberate disruption of internet or electronic communications, making them inaccessible or effectively unusable for a specific population or within a location**, often to exert control over the flow of information.
- According to Access Now, a global digital rights group, **India implemented at least 84 internet shutdowns in 2022, the most of any country that year**. Since 2016, India has accounted for approximately 58% of all shutdowns documented in the Shutdown Tracker Optimization Project (STOP) database, which tracks and verifies shutdown incidents around the world.

Why do authorities impose internet shutdowns?

Reasons for Internet Shutdowns	Explanation
National Security Concerns	<p>Preventing Unrest: Authorities may believe that shutting down the internet is necessary to prevent the organization and coordination of protests or rebellions, particularly during times of political instability.</p> <p>Counterterrorism: Governments may argue that internet shutdowns are necessary to curb terrorist activities by disrupting communication channels used by extremist groups.</p> <p>Information Control: Controlling the flow of information is seen as a strategy to manage potential threats to national security, preventing the spread of sensitive or subversive content.</p>
Social Unrest and Protests	<p>Suppression of Dissent: Internet shutdowns are sometimes used as a tool to suppress dissent and prevent the organization of protests or opposition movements that could challenge the government.</p> <p>Avoiding Mobilization: Shutting down communication channels can hinder the mobilization of citizens, making it difficult for protest movements to gain momentum.</p> <p>Maintaining Order: Authorities may perceive internet shutdowns as a means to maintain public order and control, especially in situations of civil unrest.</p>
Electoral Processes	<p>Preventing Disinformation: Authorities may impose shutdowns during elections to prevent the spread of false information or rumours that could influence the electoral outcome.</p> <p>Maintaining Electoral Integrity: Governments may argue that controlling the internet helps ensure the integrity of the electoral process by preventing interference or manipulation.</p> <p>Controlling Election-related Communication: Authorities might impose</p>

	<p>shutdowns to control the narrative and limit communication among political groups during elections.</p>
<p>Cybersecurity Concerns</p>	<p><u>Preventing Cyber Attacks:</u> In response to perceived cybersecurity threats, authorities may shut down the internet temporarily to prevent the spread of malware, hacking attempts, or other cyber attacks.</p> <p><u>Protecting Critical Infrastructure:</u> Governments may argue that shutting down the internet is a preventive measure to protect critical infrastructure from cyber threats.</p> <p><u>Investigating Cyber Incidents:</u> Authorities may temporarily disable the internet to conduct investigations into cyber incidents without further harm.</p>
<p>Public Safety and Crisis</p>	<p><u>Managing Crisis Situations:</u> During natural disasters, pandemics, or other crises, authorities may shut down the internet to manage the dissemination of information and prevent panic.</p> <p><u>Controlling Rumors:</u> Shutting down the internet can be used to control the spread of rumours and misinformation that may arise during crises.</p> <p><u>Emergency Response Coordination:</u> Authorities may believe that limiting internet access helps in coordinating emergency response efforts more effectively.</p>
<p>Cultural or Religious Events</p>	<p><u>Preserving Cultural Values:</u> In some cases, authorities may shut down the internet to preserve cultural or religious values during specific events or festivals.</p> <p><u>Avoiding Offensive Content:</u> Governments may seek to prevent the circulation of content deemed offensive or inappropriate during cultural or religious celebrations.</p> <p><u>Maintaining Social Harmony:</u> Shutting down the internet is seen as a measure to maintain social harmony and prevent potential conflicts arising from cultural or religious differences.</p>

What are the impacts of internet shutdowns?

- **Freedom of expression and information:** It violates the right to freedom of expression and information by restricting access to diverse sources of information and platforms for communication. It hinders the work of journalists, activists and human rights defenders who rely on the Internet to document and report on issues of public interest and hold authorities accountable.
- **Freedom of assembly and association:** It violates the right to freedom of assembly and association by disrupting the ability of people to organize, mobilize and participate in peaceful protests and social movements. It isolates communities and creates a climate of fear and intimidation.
- **Education:** Internet shutdowns violate the right to education by disrupting access to online learning resources and platforms, especially during the COVID-19 pandemic when schools and colleges have shifted to online modes of teaching and learning. It affects students' academic performance and career prospects by interfering with examinations and admissions processes.
- **Health:** It violates the right to health by disrupting access to online health services and information, especially during the COVID-19 pandemic when telemedicine and digital health initiatives have become crucial for providing health care. It affects public health responses by hampering data collection, analysis and dissemination.
- **Economy:** It violates the right to work and livelihood by disrupting access to online markets, businesses and financial services. It affects economic growth and development by causing losses in productivity, revenue and investment.

What are the legal and policy frameworks governing internet shutdown?

- **Section 144 of the Code of Criminal Procedure (CrPC):** Empowers district magistrates or commissioners of police to issue orders to prevent any nuisance or disturbance of public tranquillity, which may include orders to suspend internet services.
- **Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017:** These rules were issued under the Indian Telegraph Act, 1885, and according to these rules, **internet shutdowns can only be ordered by the home secretary at the central or state level, or by an authorized officer not below the rank of joint secretary in unavoidable circumstances. The orders have to be reviewed by a review committee within five working days** and have to be communicated to the telecom service providers and the public.

Aspect	Challenges	Opportunities
Legal Framework	Lack of clear international laws and standards against shutdowns.	Advocacy for international treaties and agreements prohibiting internet shutdowns.
	Governments exploit vague or outdated laws to justify shutdowns.	Strengthening national legal frameworks to explicitly protect the right to internet access.
Technical Measures	Use of advanced censorship and surveillance technologies.	Development and deployment of circumvention tools and technologies.
	Government control over ISP (internet service providers) and telecommunications infrastructure.	Encouraging the use of decentralized and mesh networking technologies.
Public Awareness	Limited awareness among the general population about the impact of shutdowns.	Raising awareness through media campaigns, education, and advocacy.
	Governments spreading misinformation to justify shutdowns.	Fostering media literacy to help the public discern accurate information.
Digital Rights Advocacy	Limited resources and funding for advocacy organizations.	Collaborative efforts among NGOs, activists, and international organizations.
	Threats and harassment against digital rights activists.	Building alliances with other human rights movements to amplify impact.
Political Will	Authoritarian regimes use shutdowns to suppress dissent.	Building global pressure through diplomatic channels and sanctions.
	Lack of political will among some countries to address the issue.	Engaging with democratic governments to champion digital rights globally.
Economic Impact	Negative effects on businesses and the economy due to disrupted services.	Highlighting economic losses as a persuasive argument against shutdowns.
	Governments downplaying economic consequences of shutdowns.	Involving businesses in advocacy to lobby against shutdowns.
International Cooperation	Lack of a unified global response to internet shutdowns.	Forming coalitions and alliances among countries and organizations to condemn and address shutdowns.
	Some countries support each other's shutdowns for political reasons.	Leveraging international bodies like the UN to condemn and address shutdowns.

Conclusion

- Internet shutdowns pose a serious threat to human rights, democracy, and development in India and globally, and their utilization should be minimized. Prioritizing alternatives that uphold human rights and facilitate open communication is essential. To build a more resilient and inclusive digital world, there should be a commitment to transparency, accountability, and upholding fundamental rights online.

1.4 NATIONAL RESEARCH FOUNDATION

Context

- The Indian government's interim budget for 2024-25 did not allocate any funds or mention progress on the National Research Foundation (NRF), despite approving a Bill for its establishment in June 2023.

Details

- Scientists expressed concern about the lack of progress, urging the government to move the NRF from the planning phase and establish an administrative structure.
- The NRF was proposed to centralize scientific research funding but questions remain about its governance structure and transparency.
- Initial plans proposed an independent governing board, but recent announcements suggest government control.
- Funding allocated to the NRF is significantly lower compared to established departments, raising concerns about its ability to fulfil its purpose.
- The full Union Budget, to be presented later this year, may provide further details on NRF and other scientific departments' allocations.

What is the National Research Foundation and why is it important for India?

- It was **announced by the Finance Minister in the 2019 budget** speech and approved by the Cabinet in 2023.
- It is a proposed body that **aims to fund, coordinate, and promote research across various disciplines in India**, and will subsume the existing Science and Engineering Research Board (SERB).
- The **NRF is allocated a budget of Rs. 50,000 crores over a span of five years (2023-28)**, aiming to support and enhance scientific research and innovation in the country.

What are the objectives of the NRF?

- **Research Ecosystem Strengthening:** NRF aims to strengthen the research ecosystem by providing support for research across all disciplines, including interdisciplinary and social science research, fostering a diverse and comprehensive scientific landscape.
- **Addressing National Priorities:** Identifying and addressing national priority areas, such as clean energy, climate change, healthcare, infrastructure, and transportation, by aligning science and technology interventions with the country's development goals.
- **University Research Capacity Building:** NRF seeks to enhance research capacities in universities by encouraging active researchers, regardless of age, to take up NRF professorships. This initiative aims to promote collaboration with existing faculty, fostering a culture of research within academic institutions.
- **Inclusive Research Funding:** Beyond natural sciences, NRF aims to fund and promote research in humanities, social sciences, arts, and Indian languages and knowledge systems, promoting a holistic approach to knowledge creation and application across diverse sectors.

How will the NRF function?

- **Establishment and Governance:** NRF is established through a parliamentary act and governed by a Board, with the Prime Minister as ex-officio President, and Union Ministers of Science & Technology and Education as ex-officio Vice-Presidents. The Executive Council, chaired by the Principal Scientific Adviser, oversees its functioning.
- **Divisional Structure:** NRF comprises four major divisions - Basic Research, Applied Research, Translational Research, and Social

Sciences Research, facilitating focused initiatives in various research domains.

- **Directorates for Collaboration:** Each division has its directorate overseeing grant processes, monitoring project progress, and fostering collaboration among researchers, institutions, industry, and government, ensuring effective management.
- **Diversity and Equity in Funding:** NRF adopts a competitive and merit-based funding approach, ensuring impartial evaluation by independent peer-review committees. The emphasis on equitable distribution prioritizes fair allocation across regions, disciplines, institutions, genders, and social groups.

What are the expected benefits of the NRF?

- **Research Excellence:** The NRF is expected to significantly enhance the quality and quantity of research output in India by providing substantial funding and necessary infrastructure, fostering an environment conducive to high-quality research.
- **Professional Growth:** Through mentoring programs and recognition mechanisms, the NRF aims to nurture and acknowledge researchers' contributions, promoting their professional growth and creating a supportive ecosystem for continuous development.
- **Cultural Transformation:** The NRF seeks to cultivate a culture of curiosity, creativity, collaboration, and excellence within the

research community and institutions, fostering an environment that promotes innovation and higher standards of research.

- **Integrated Education and Research:** By integrating research and higher education into a cohesive system, the NRF aims to bridge the gap, ensuring a seamless connection between academia and research activities, and creating a more dynamic and interconnected educational landscape.
- **National and Global Impact:** The NRF is designed to direct research efforts towards addressing national challenges, aligning projects with societal needs, and developing a policy framework for collaboration with industry. These initiatives are expected to create meaningful impact, encouraging innovation and enhancing India's global competitiveness and reputation as a leader in science and innovation.

Conclusion

- The National Research Foundation (NRF) is a transformative initiative aimed at centralizing research funding to unleash India's scientific potential, foster collaboration across disciplines, and address the nation's research needs, ultimately contributing to economic growth, social development, cultural enrichment, and global leadership.

1.5 FREE LEGAL AID

Context

- The Chairman of the Department-related Parliamentary Standing Committee on Personnel, Public Grievances, Law, and Justice presents the One Hundred Forty-Third Report, reviewing the working of Legal Aid under the Legal Services Authorities Act, 1987.

Free Legal Aid in India

- **Article 39A of the Constitution of India** emphasizes the provision of free legal aid to the poor and weaker sections, ensuring justice for all. Additionally, **Articles 14 and**

22(1) obligate the state to ensure equality before the law and a legal system promoting justice based on equal opportunity.

Who Provides?

- **National Legal Services Authority (NALSA):** The apex body established under the Legal Services Authorities Act, 1987, responsible for framing policies and guidelines for legal aid implementation across India. It monitors and evaluates the functioning of State Legal Services Authorities (SLSAs) and provides financial and technical assistance.
- **State Legal Services Authorities (SLSAs):** Established in each state and union territory,

they implement the legal aid scheme at the state level, including operating legal aid clinics, providing legal advice and awareness programs, and coordinating with district and taluka legal services authorities.

- **District Legal Services Authorities (DLSA):** Function at the district level, managing legal aid clinics, organizing Lok Adalats (alternative dispute resolution forums), and registering legal aid cases within their jurisdiction.
- **Taluka Legal Services Authorities (TLSA):** Established in some states at the sub-district level, assisting DLSA in legal aid service delivery.

Who is Eligible?

- **Members of Scheduled Castes (SC) and Scheduled Tribes (ST):** Recognized communities facing historical marginalization, entitled to legal aid regardless of income.
- **Women and children:** Vulnerable groups requiring special protection are entitled to legal aid regardless of income.
- **Mentally ill or otherwise disabled persons:** Individuals facing challenges due to disabilities are entitled to legal aid regardless of income.
- **Victims of trafficking bonded labour, and underserved situations:** Individuals, who have been subjected to exploitation and hardship, are entitled to legal aid regardless of income. (e.g., victims of human trafficking bonded labour, natural disasters, caste atrocities).
- **Industrial workers:** Individuals employed in factories and other industrial settings, subject to income limits as stipulated by the respective state government.
- **Individuals below a certain income limit:** Varies by state, but generally applies to individuals and families with annual income below a specific amount.

Concerns and Recommendations of the Parliamentary Standing Committee

Awareness and Legal Education

- Lack of awareness, a key factor in the justice gap, is evident in the **India Justice Report 2019**, revealing that only 15 million out of

80% eligible population accessed legal aid since 1995.

- Disproportionate representation of marginalized communities in jails, especially undertrials, underscores the urgent need for a government-led mass media campaign to educate the eligible population about legal aid.
- **Expressing concern for vulnerable sections**, particularly undertrial prisoners, recommends NALSA's active involvement in addressing the issue through effective education and awareness initiatives.

Budgetary Constraints and Allocations

- Acknowledges NALSA's critical role in legal aid but notes budgetary constraints, including a static Grant-in-aid, impacting planned services.
- **Stresses the urgent need for a comprehensive re-evaluation of budgetary priorities** due to the impact of social and economic disparity on democratic objectives, highlighted by India's low per capita legal aid spend (0.75 paise in 2017-18), strongly recommending a substantial increase in Grant-in-aid to NALSA for planned activities.

Role of Lawyers and Compensation

- **Recognizes the challenge of lawyers' reluctance to provide pro bono services**, impacting access to legal assistance for those in need.
- **Addresses compensation structure challenges, advocating for mandatory pro bono work**, recommending the Bar Council of India's involvement, and suggesting the formation of pro bono panels by designated Senior Advocates to ensure equitable legal services.

Challenges in Lok Adalats

- Acknowledges challenges faced by Lok Adalats due to limited powers and procedural shortcomings.
- **Recommends a comprehensive review of powers and procedures to enhance Lok Adalats' effectiveness**, alongside emphasizing the importance of infrastructure improvement, staff, and the adoption of modern technology for efficient functioning.

Underutilization of Para-legal Volunteers

- Acknowledges underutilization of Para-legal Volunteers (PLVs) for various reasons.
- **Recommends immediate measures such as regular training, capacity building,** adequate resources, support, and compensation for PLVs, alongside awareness campaigns and outreach programs to inform the public about their crucial role, emphasizing the need to build trust and rapport between PLVs and the community.

Increased Access to Legal Aid to the Prisoners

- Observe inadequate legal aid to prisoners during committee visits.
- **Recommends a comprehensive exercise by NALSA** to enhance access to legal aid for all prisoners, including the centralization of the application process for prompt allocation of counsel and minimal delays.

Legal Aid Defence Counsel Scheme

- **Introduces the Legal Aid Defence Counsel System (LADCS)** for criminal matters, inspired by public defender systems in developed countries.

- **Appreciates LADCS as a paradigm shift and expresses optimism for improved quality,** recommending transparent selection processes for competent and dedicated lawyers to enhance its effectiveness.

Manning the NALSA

- Notes NALSA's increased activities but faces challenges due to staff shortage.
- **Recommends the creation of an additional 40 posts for NALSA** to enhance functioning and urges proactive steps to regularly fill vacant posts for sustained operational efficiency.

Conclusion

- Despite its significant contributions, NALSA faces challenges such as budgetary constraints, lack of proper infrastructure in certain regions, and ensuring adequate training and resources for legal aid providers. However, NALSA remains committed to its mission and continues to explore new avenues to enhance legal aid accessibility and effectiveness for the underprivileged population of India.

1.6 EVALUATION OF SMART CITIES MISSION

Context

- A parliamentary committee on Housing and Urban Affairs underscores the importance of launching the next phase of the Smart Cities Mission, with a particular focus on tier-2 cities situated within 100 km of State capitals.

Key Highlights of the Parliamentary committee's report on the Smart Cities Mission

- **Focus on Tier-2 Cities:** The committee emphasizes the importance of launching the next phase of the Smart Cities Mission, with a particular focus on tier-2 cities located within 100 km of state capitals. This suggests a shift in focus from larger cities to smaller ones for the mission's expansion.
- **Digital Infrastructure Concerns:** The committee raises concerns about the potential misuse of digital infrastructure created under the Smart Cities Mission. It emphasizes the need to ensure the right to privacy and the security of digital platforms from cyber attacks.
- **Mission Overview:** The Smart Cities Mission, launched in June 2015, aims to promote cities that offer core infrastructure, a clean and sustainable environment, and a decent quality of life through the application of smart solutions. Initially, 100 cities were selected through a competitive process between January 2016 and June 2018.
- **Mission Timeline Extension:** Originally scheduled to be completed by June 2023, the mission received an extension until June 2024 to finish pending projects.
- **Recommendations for Expansion:** The committee recommends expanding the role of Integrated Command and Control Centres (ICCCs) in smart cities to provide a variety of services in health, internal security, waste management, traffic management, disaster management, and e-governance.

- **Data Protection Measures:** With digital infrastructure expected to generate and use large volumes of data, the committee emphasizes the need for a robust system to protect digital platforms from cyber attacks and to safeguard sensitive public and private data.

Achievements

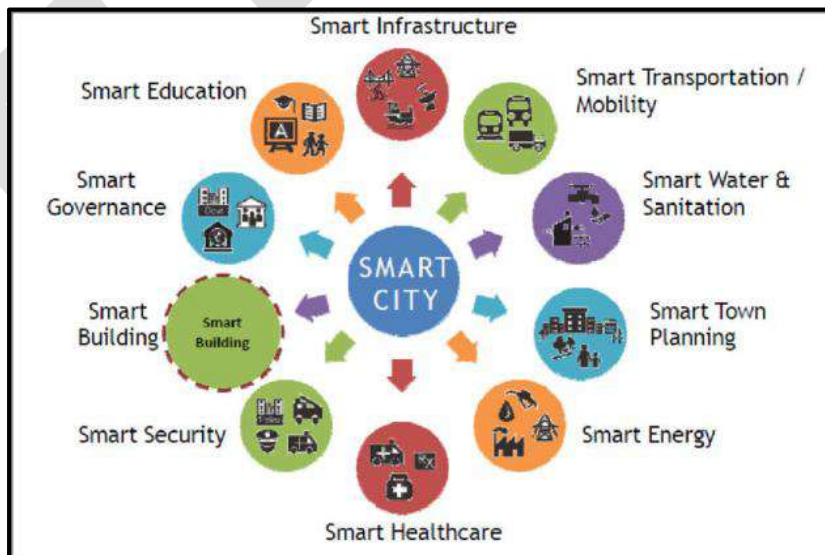
- **Infrastructure development:** Progress has been made in areas like water supply, sanitation, solid waste management, and urban mobility. Several cities have completed projects in these areas, improving the quality of life for residents.
- **Technology adoption:** There's been increased use of technology solutions, such as smart traffic management, e-governance services, and surveillance systems. This has the potential to improve efficiency and citizen engagement.
- **Economic growth:** Some cities have attracted investments and created new job opportunities through the mission.
- **Learning and replication:** The mission has generated valuable experience in urban development and project management, which can be used for other cities.

Smart Cities Mission

- The Smart Cities Mission was launched by the Government of India in 2015 as a key component of its larger urban renewal and retrofitting program.
- The rapid urbanization in India has led to challenges such as inadequate infrastructure, congestion, pollution, and insufficient civic amenities.
- The mission aimed to address these challenges by leveraging technology and data-driven solutions for sustainable urban development.

Features

- **Technology Integration:** Use of Information and Communication Technology (ICT) to enhance urban services. Implementation of smart solutions like intelligent traffic management, waste management, and energy-efficient systems.
- **Area-Based Development:** Cities identified specific areas for comprehensive development, known as Area-Based Development (ABD). It focuses on integrated infrastructure development in selected zones to create a model for the entire city.



- **Pan-City Development:** In addition to ABD, cities also proposed Pan-City solutions addressing challenges that are common across the city. These solutions aim for city-wide improvement in governance, infrastructure, and services.
- **Citizen Participation:** Emphasis on citizen engagement through participatory planning and decision-making. The use of digital platforms to involve citizens in shaping the development agenda.
- **Sustainability and Inclusivity:** Promotion of sustainable and inclusive development practices. Focus on green infrastructure, energy efficiency, and accessible amenities for all sections of society.

Significances

- **Quality of Life Improvement:** Enhanced urban infrastructure contributes to a better quality of life for residents.
- **Economic Growth:** Improved urban services and infrastructure stimulate economic activities, attracting investments and generating employment.
- **Technological Advancements:** Integration of technology improves the efficiency of urban services, making cities more responsive to the needs of the residents.
- **Sustainable Development:** Implementation of green solutions and sustainable practices contributes to environmental conservation.
- **Citizen Empowerment:** Citizen Participation fosters a sense of ownership and empowerment, making urban governance more responsive and accountable.

Steps Taken

- **City Selection and Proposals:** Cities submitted proposals detailing their vision, strategy, and projects for Smart City development. Selection is based on a competitive process evaluating proposals and feasibility.
- **Formation of Special Purpose Vehicles (SPVs):** Each selected city formed an SPV to plan, implement, and manage the Smart City projects.
- **Funding Mechanisms:** Funding from the central government, state governments, and private sector through public-private partnerships (PPPs).
- **Project Implementation:** Implementation of projects based on the identified priorities, including infrastructure development, technology integration, and citizen-centric initiatives.
- **Monitoring and Evaluation:** Regular monitoring and evaluation of project progress and impact to ensure accountability and efficiency.

Challenges

- **Funding Constraints:** Many cities faced challenges in mobilizing funds, impacting the pace of project implementation.
- **Bureaucratic Hurdles:** Administrative complexities and delays in decision-making processes.
- **Equity Concerns:** Unequal distribution of benefits, with concerns about whether the improvements reach all sections of the population.
- **Technological and Capacity Challenges:** Integration of technology poses challenges, especially for smaller cities with limited technical capacities.

Way Forward

- **Capacity Building:** Strengthening the technical capabilities of local bodies for effective planning and implementation.
- **Innovative Financing:** Exploring innovative financing models, such as municipal bonds and impact investments, to overcome funding challenges.
- **Public-Private Partnerships (PPPs):** Encouraging and facilitating more robust PPPs to leverage private sector expertise and resources.
- **Data-driven Governance:** Enhancing data-driven decision-making to improve efficiency and responsiveness of urban services.
- **Community Engagement:** Continuous efforts to enhance citizen participation, ensuring inclusivity in decision-making processes.
- **Sustainability Focus:** Continued emphasis on sustainable and green solutions to address environmental concerns.
- **Replication of Best Practices:** Learning from successful implementations and replicating best practices in other cities.

Conclusion

- The Smart Cities Mission is a complex and ambitious undertaking with both noteworthy achievements and ongoing challenges. A comprehensive evaluation requires acknowledging both sides, learning from the experiences of various cities, and implementing necessary adjustments to maximize the mission's impact on creating sustainable, inclusive, and technologically advanced urban spaces for all citizens of India.

1.7 EPIDEMIC DISEASES ACT (EDA) 1897

Context

- The 286th Law Commission Report addresses the limitations of the Epidemic Diseases Act, 1897 (EDA) and proposes significant changes to enhance the legal framework for handling future epidemics.

Details

- The 286th Law Commission Report highlights the limitations of the Epidemic Diseases Act, 1897 (EDA), which was enacted during the colonial era and is deemed inadequate for addressing the challenges posed by modern infectious diseases, especially in the context of globalization and increased connectivity.

Key Recommendations of the Law Commission Report

Creation of an Epidemic Plan

- **Collaborative Development:** The report suggests that the Central government should take the lead in developing an Epidemic Plan. This plan should be created in collaboration with state governments, relevant ministries, private health institutions, expert bodies, and other stakeholders.
- **Periodic Review and Update:** Recognizing the dynamic nature of infectious diseases, the report emphasizes the need for periodic reviews and updates of the Epidemic Plan. This ensures that the plan remains effective in addressing emerging health threats.

Demarcation of Powers

- **Coordination:** The report highlights the lack of coordination between different levels of government during epidemics. The Epidemic Plan is envisioned to address this by clearly defining the powers and obligations of the

Central government, state governments, and local authorities.

- **Coordinated Response:** The goal is to ensure a coordinated and efficient response to public health emergencies, avoiding confusion and overlapping responsibilities.

Amendments to the Epidemic Diseases Act (EDA)

- **Inadequacy of the EDA:** The report identifies the limitations of the Epidemic Diseases Act, 1897, which was enacted during the colonial era. The act is considered outdated and potentially prone to misuse.
- **Comprehensive Amendments:** The report recommends either comprehensive amendments to the EDA or the introduction of a new law to address the current challenges posed by infectious diseases. The amendments should address gaps and loopholes in the existing legal framework.

Privacy-Friendly Disease Surveillance

- **Balancing Public Health and Privacy:** The Epidemic Plan should incorporate provisions for disease surveillance that respect individual privacy. This involves striking a balance between effective disease monitoring and safeguarding the privacy rights of individuals.
- **Regulations for Data Handling:** The plan should include regulations governing the collection, storage, and use of personal health data, ensuring that surveillance measures are lawful and transparent.

Regulation of Medical Supplies

- **Equitable Access:** Provisions should be included in the Epidemic Plan to regulate the distribution, availability, and transport of medical supplies. This aims to ensure equitable access to critical medical resources during epidemics and prevent hoarding.

- **Preventing Shortages:** By regulating the supply chain, the plan aims to prevent shortages and ensure that essential medical supplies are distributed where they are most needed.

Dissemination of Information

- **Timely and Transparent Communication:** The Epidemic Plan should include provisions for the timely and transparent dissemination of information to the public. This involves communicating information about the nature of the epidemic, preventive measures, available healthcare resources, and other relevant details.
- **Building Public Trust:** Effective communication builds public trust and encourages adherence to recommended health measures, contributing to better epidemic control.

Testing, Research, and Vaccine Distribution

- **Comprehensive Approach:** The Epidemic Plan should address various aspects of managing infectious diseases, including medical testing, research for vaccinations and medicines, and the distribution of vaccines.
- **Equitable Distribution:** Ensuring equitable access to vaccines is a critical aspect, of preventing disparities in healthcare access during an epidemic.

Safe Disposal of Infectious Waste

- **Environmental Safety:** Provisions for the safe disposal of infectious waste are crucial to prevent environmental hazards during an epidemic.
- **Regulatory Framework:** The Epidemic Plan should outline a regulatory framework for the proper and safe disposal of waste generated in healthcare settings during the management of infectious diseases.

Standard Operating Procedure (SOP)

- **Coordinated Response Framework:** The report recommends the creation of an SOP to provide a structured and coordinated response at different stages of the epidemic.
- **Three Stages Defined:**
 - **Stage 1 - Outbreaks in the State:** States have the power to take sufficient measures, including local authorities implementing preventive measures.
 - **Stage 2 - Inter-State Spread:** The Central government can frame regulations, and states must act in accordance with these regulations.
 - **Stage 3 - Extreme Threat:** If states are unable to contain the infection and there are conflicting guidelines, the Central Government may impose uniform measures to address the significant threat to public health.

Law Commission	
Aspect	Explanation
Non-Statutory Body	Established by an executive order, not by an act of Parliament, granting flexibility in structure and operations. Compared to a statutory body created by an act of Parliament, which might have a more rigid structure.
Established	Long history of providing legal reform advice to the Indian government. The first Law Commission was appointed in 1834 during British rule.
Appointed by	Ministry of Law & Justice, Department of Legal Affairs.
Function	<p>Initiated research: Identifies legal areas needing reform based on internal analysis or government references (e.g., outdated laws, complex legal procedures).</p> <p>Consultations: Engages with legal professionals, academics, and stakeholders (e.g., NGOs, and industry representatives) to gather diverse perspectives.</p> <p>Comparative analysis: Studies legal frameworks of other countries for potential solutions and best practices (e.g., analyzing how other countries address similar legal issues).</p> <p>Drafting recommendations: Proposes legislative changes based on research and</p>

	<p>consultations (e.g., simplifying procedures, increasing access to justice).</p> <p>Reporting: Prepares comprehensive reports outlining findings and recommendations (e.g., The Law Commission of India Report No. 268 on Identification of Prisoners).</p>
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Conclusion

- The Law Commission Report advocates for a comprehensive and collaborative approach to epidemic management, addressing legal deficiencies, enhancing coordination, and establishing clear procedures to ensure an effective response to future infectious disease challenges.

1.8 SHORT ARTICLES

Technology Development Fund Scheme

Context

- The Defense Research Development Organisation (DRDO) has successfully demonstrated the in-orbit functionality of a green propulsion system developed under the Technology Development Fund (TDF) scheme.

Details

- A green propulsion system, designed for altitude control and orbit keeping of microsatellites, has successfully demonstrated its functionality in orbit. The technology aims to provide an environmentally friendly alternative for satellite propulsion.
- The project was sanctioned to a Bengaluru-based start-up, which served as the development agency for the 1N Class Green Monopropellant thruster. The development was carried out under the guidance of the project monitoring and mentoring group of DRDO.
- The in-orbit demonstration took place on a payload launched by the Indian Space Research Organisation's (ISRO) Polar Satellite Launch Vehicle (PSLV) C-58 mission.

Green Propulsion Systems

- A type of technology that aims to reduce the environmental impact of transportation and other activities. They do this by using cleaner fuels and more efficient engines, which can

help to reduce greenhouse gas emissions and other pollutants.

- They minimize greenhouse gas emissions and air pollution, making them environmentally friendly compared to traditional fossil fuel-based propulsion.
- These systems contribute to more sustainable transportation practices, particularly in space exploration and long-distance flights, by utilizing renewable energy sources or more efficient propulsion methods.

Technology Development Fund (TDF) Scheme

Purpose

- Promote self-reliance in defence technology as part of the 'Make in India' initiative.

Managed by

- Ministry of Defence (MoD) through the Defence Research and Development Organisation (DRDO).

Targeted Beneficiaries

- MSMEs (Micro, Small and Medium Enterprises) and Startups registered in India.

Eligibility Criteria

- Registered Indian company (public/private, partnership, LLP, one-person, sole proprietorship).
- Owned and controlled by an Indian citizen.
- Foreign investment is less than or equal to 49%.

Funding Support

- Provided through grants, Project costs up to INR 10 Cr, with a maximum funding of 90%.

- Collaboration with academia is allowed, but their work involvement cannot exceed 40% of the project cost.
- Funding is linked to mutually agreed milestones.
- Released in advance against bank guarantee or reimbursed upon milestone completion.

Project Duration

- Maximum of 2 years.

Key Features

- Supports indigenous development of defence components, products, systems, and technologies.
- Encourages participation of public/private industries, especially MSMEs.
- Aims to create an ecosystem for enhancing cutting-edge defence technology capability.
- Provides technical expertise and support from DRDO.
- Offers access to testing and evaluation facilities.

Impact

- As of December 2023, supported 41 MSMEs and 20 startups.
- Contributes to India's self-reliance in defence technology.
- Boosts innovation and entrepreneurship in the defence sector.

Inclusive Education for Disabled at Secondary Stage

Context

- Five officers of the Karnataka Department of School Education and Literacy were suspended for negligence of duty related to the misappropriation of funds under the Inclusive Education for Disabled at Secondary Stage (IEDSS) scheme.

[About Inclusive Education for Disabled at Secondary Stage \(IEDSS\) Scheme](#)

About Scheme

- Inclusive Education for Disabled at Secondary Stage (IEDSS) was launched in the year 2009-10 to facilitate the education of students with disabilities.

- It replaced the earlier scheme known as Integrated Education for Disabled Children (IEDC).
- Later, in 2013, it was subsumed under the Rashtriya Madhyamik Shiksha Abhiyan (RMSA).

Objective

- The primary objective of the scheme is to enable students with disabilities to pursue four years of secondary schooling after completing eight years of elementary schooling in an inclusive and enabling environment.

Coverage

- The scheme covers children with disabilities studying in classes IX-XII in Government, local body, and Government-aided schools across the country.

Types of Disabilities Covered

- The scheme covers a wide range of disabilities including blindness, low vision, leprosy cured, hearing impairment, locomotory disabilities, mental retardation, mental illness, autism, cerebral palsy, and potentially other disabilities such as speech impairment and learning disabilities.

Special Focus on

- There is a special focus on girls with disabilities to ensure their access to secondary schools and provide them with the necessary information and guidance for their development.

Model Inclusive Schools

- The scheme envisages the establishment of Model Inclusive Schools in every State to ensure inclusive education for students with disabilities.

Components - Student-Oriented

- This category includes various components aimed at supporting students with disabilities such as medical and educational assessment, provision of books, stationery, uniforms, transport allowance, reader allowance, stipend for girls, support services, assistive devices, boarding and lodging facilities, therapeutic services, teaching-learning materials, etc.

Other Components

- Besides student-oriented components, the scheme also includes **provisions for the appointment of special education teachers**, allowances for general teachers teaching disabled children, teacher training, orientation of school administrators, the establishment of resource rooms, providing a barrier-free environment, etc.

Implementing Agency

- The scheme is **implemented by the School Education Department of State Governments and Union Territory Administrations**. Additionally, NGOs with experience in educating individuals with disabilities may be involved in its implementation.

Financial Assistance

- The Central Government provides financial assistance covering 100% of all items included in the scheme. State Governments are required to provide a scholarship of Rs. 600/- per disabled child per annum.

Post of Deputy Chief Minister

Context

- The Supreme Court dismissed a petition challenging the appointment of Deputy Chief Ministers in States, stating that no such position exists in the Constitution.

Details

- The appointment of Deputy Chief Ministers (DCMs) is not unconstitutional. The Indian Constitution **doesn't explicitly define or prohibit** the position of Deputy Chief Minister.

Supreme Court Judgment

- The court rejected the petitioner's arguments, stating:
 - **No breach of Article 14:** Since DCMs are still ministers and subject to the same rules as other ministers, there's no violation of equal treatment.
 - **Not bypassing the Constitution:** The court emphasized that appointing DCMs falls under the state's power to manage its council of ministers, which is allowed under Article 163(1).

- **Article 163(1) of the Constitution allows states to have a council of ministers with the Chief Minister as head.** This implies the state has the power to structure the council as it sees fit, as long as it doesn't violate any existing constitutional provisions.
- The court clarified that **the title "Deputy Chief Minister" is simply a designation and doesn't create a separate constitutional office.**
- The Supreme Court ruled that the practice of appointing DCMs doesn't violate any constitutional provisions. This is because:
 - A DCM is ultimately a minister, just like other members of the council of ministers.
 - The designation of "Deputy Chief Minister" is simply a title and doesn't change their legal status or responsibilities as a minister.

Deputy Chief Minister in Indian Politics

- The appointment of a Deputy Chief Minister (Deputy CM) is a long-standing feature of Indian politics. While not explicitly mentioned in the Constitution, this position plays a crucial role in coalition governments and situations where no single leader commands unchallenged authority within the ruling party or across key interest groups in the state.
- Present in at least 13 states as of February 2024. The number varies across states and can change based on political circumstances.

Purpose

- **Political Compromise:** Accommodate different factions within a coalition government or the ruling party, ensuring broader political support and stability. A state with a hung assembly might appoint a Deputy CM from a smaller party that helped form the government. This can also be used to appease influential caste or regional groups within the state.
- **Stability:** Strengthen the government by providing additional leadership expertise and managing potential internal conflicts. A Deputy CM with experience in a specific sector might be appointed to handle critical portfolios like finance or infrastructure. This

can help ensure the smooth functioning of the government and address key challenges.

Rank and Benefits

- Equivalent to a Cabinet Minister in terms of rank, salary, and perks.
- The Deputy CM enjoys the same benefits as other Cabinet Ministers in the state government

Roles and Responsibilities

- **Assisting the Chief Minister:** Share administrative and governance responsibilities with the Chief Minister. The Deputy CM might chair cabinet meetings when the Chief Minister is unavailable or represent the state at national events.
- **Portfolio Management:** Holds smaller, specific portfolios based on expertise, experience, or power-sharing agreements. A Deputy CM from an agricultural background might manage the agriculture department, while another from a finance background might handle the finance ministry.
- **Political Significance:** Signals power-sharing dynamics, party alliances, and intra-party loyalties within the state government. The appointment of a young leader as Deputy CM might indicate a focus on youth inclusion while appointing a leader from a minority community might reflect commitment to diversity.

Conclusion

- While not constitutionally mandated, the post of Deputy Chief Minister remains integral in Indian politics, representing a delicate balance between power-sharing and stability, with its prominence evident across various states.

Lokpal

Context

- Supreme Court judge Ajay Manikrao Khanwilkar is elected as the new chairperson of Lokpal.

Background

- The Administrative Reforms Commission (ARC) recommended (1966-1970) the establishment of two authorities (Lokpal and Lokayukta), inspired by the Ombudsman

model in Scandinavian countries and the parliamentary commissioner for investigation in New Zealand.

- The Lokpal would handle complaints against ministers and secretaries at the Central and state levels, while the Lokayukta would deal with complaints against other specified higher officials. ARC suggested keeping the judiciary outside Lokpal's purview.

Government Acceptance

- The government accepted the ARC recommendations. Ten official attempts were made to legislate on this, with bills introduced in different years. The first four bills lapsed due to Lok Sabha's dissolution, the fifth was withdrawn, and subsequent bills faced a similar fate. The ninth bill (2011) was withdrawn by the government.

Lokpal and Lokayuktas Act (2013)

Establishment

- Lokpal at the Centre and Lokayukta at the State level.

Jurisdiction

- Includes the Prime Minister, Ministers, Members of Parliament, and Groups A, B, C, and D officers and officials of the Central Government.

Composition of Lokpal

- Consists of a Chairperson with a maximum of 8 members. **50% of members must be judicial members.**

Inclusive Representation

- 50% of members must come from SCs, STs, OBCs, minorities, and women.

Selection Process

- The committee includes the Prime Minister, Speaker of the Lok Sabha, Leader of the Opposition, Chief Justice of India, and an eminent jurist nominated by the President. A Search Committee assists in the selection process.

Inclusion of Prime Minister

- Prime Minister included under Lokpal's purview with subject matter exclusions and a specific process for handling complaints.

Extensive Jurisdiction

- Covers all categories of public servants, including Group A, B, C, and D officers and employees of the government.

Superintendence Powers

- Lokpal has superintendence over investigating agencies, including the CBI, for cases referred to them.

Attachment and Confiscation

- Provisions for attachment and confiscation of property of public servants acquired by corrupt means.

Penalty Enhancement

- The maximum punishment under the Prevention of Corruption Act increased from seven to ten years. Minimum punishment was also revised.

Entities under Jurisdiction

- Institutions fully or partly financed by the government fall under Lokpal's jurisdiction, excluding those aided by the government.

Protection for Public Servants

- Protects honest public servants. Lokpal is empowered to grant sanction for the prosecution of public servants.

Appointments of DGPs

Context

- The Ministry of Home Affairs (MHA) has directed several states to follow the Supreme Court's guidelines on the appointment of Director Generals of Police (DGPs).

Details

- The Ministry of Home Affairs (MHA) directed several states to adhere to the Supreme Court's guidelines established in the landmark **Prakash Singh case (2006) regarding the appointment of Director Generals of Police (DGPs)**. This directive is crucial for ensuring transparency, merit-based selection, and a fixed tenure for DGPs, fostering a more professional and independent police force.

The Director General of Police (DGP) is the **highest-ranking police officer within an Indian state or union territory**. They serve as the head of the entire state/UT police force. The DGP is also referred to as the State Police Chief.

Key Points of the Supreme Court Guidelines

- **Merit-based Selection:** The guidelines mandate a merit-based selection process for DGP appointments. This means the most qualified and suitable officers based on seniority, service record, and performance should be chosen, irrespective of political considerations.
- **Fixed Tenure:** DGPs must be appointed for a **fixed tenure of two years**, safeguarding them from political influence and allowing them to implement long-term strategies without fear of premature removal.
- **UPSC's Role:** The Union Public Service Commission (UPSC), an independent constitutional body, plays a vital role in the selection process. States submit a list of eligible IPS officers to the UPSC, who then

CBI Strengthening Provisions

- Contains provisions to strengthen the CBI, including the setup of a Directorate of Prosecution and the maintenance of a panel of advocates.

Entities under FCRA

- Entities receiving donations over ₹10 lakhs per year under the Foreign Contribution Regulation Act (FCRA) come under Lokpal's jurisdiction.

Mandate for States

- Mandate for states to set up Lokayukta within 365 days from the Act's commencement.

Conclusion

- The Lokpal's establishment marks a critical step towards addressing corruption in India. However, its long-term success hinges on its effective implementation, sustained independence, and commitment to tackling corruption across all levels of government. Evaluating its overall impact and drawing definitive conclusions will require continued monitoring and assessing its effectiveness in achieving its anti-corruption goals.

shortlist candidates based on pre-defined criteria. The state government then makes the final selection from the UPSC's shortlist.

Reasons for the MHA's Directive

- **Non-Compliance by States:** Some states have been accused of not fully adhering to the Supreme Court guidelines. This includes appointing temporary or "acting" DGPs for extended periods or bypassing the UPSC's recommendations.
- **Political Interference:** The practice of appointing temporary DGPs can be seen as an attempt by ruling parties to exert political control over the police force. This can hinder police autonomy and effectiveness.
- **Lack of Stability:** Frequent leadership changes can lead to instability and inconsistency within the police force, hindering long-term planning and implementation of reforms.

Benefits of Adhering to the Guidelines

- **Enhanced Professionalism:** Merit-based selection and fixed tenures can foster a more professional police force where officers are chosen based on their qualifications and commitment to their duty.
- **Reduced Political Influence:** Fixed tenures and UPSC involvement can help insulate DGPs from undue political influence, enabling them to make independent decisions and function autonomously.
- **Improved Effectiveness:** Stable leadership and a focus on merit-based selection can lead to a more effective police force, better equipped to tackle crime and maintain law and order.

Challenges in Implementing the Guidelines

- **Political Resistance:** Political parties may resist giving up control over police appointments.
- **Bureaucratic Hurdles:** Delays and complexities in the selection process can occur due to bureaucratic hurdles.
- **Limited Pool of Qualified Candidates:** In some states, finding a sufficient pool of eligible and qualified officers within the state cadre might pose a challenge.

Conclusion

- The MHA's directive serves as a reminder of the importance of adhering to the Supreme Court guidelines for DGP appointments. While implementing these reforms may face challenges, the potential benefits of a more professional and effective police force are undeniable. Continued efforts by the MHA and civil society organizations are crucial to ensure that these guidelines are followed across all states, leading to a stronger and more independent police force in India.

Bail under the Unlawful Activities Prevention Act

Context

- The Supreme Court's decision to deny bail under the Unlawful Activities Prevention Act (UAPA) is based on the unique provisions and stringent nature of the UAPA.

Details

- The Unlawful Activities (Prevention) Act, 1967 (UAPA) deals with offenses related to terrorism and other unlawful activities. Obtaining bail under this act can be challenging compared to other offences due to stricter provisions.

Bail under UAPA

- Bail under the UAPA is significantly more difficult to obtain than regular bail in other criminal cases. This is due to the following:
 - **Presumption of Guilt:** Section 43D(5) of the UAPA introduces a presumption of guilt against the accused. If the court finds "reasonable grounds" to believe the accusations in the chargesheet are true, it must deny bail. The burden shifts to the accused to prove these accusations are not prima facie (at first glance) true.
 - **Stringent Conditions:** Even if the court decides to grant bail, it can impose strict conditions as it deems fit.

Factors the Court Considers for Bail Under UAPA:

- **Nature and Severity of the Allegations:** The court evaluates the gravity of the offence and the potential threat posed by the accused.
- **Stage of the Investigation:** Bail is less likely in the early stages of a case.
- **Potential for Tampering with Evidence:** If the court believes the accused may influence witnesses or evidence, bail may be denied.
- **Flight Risk:** The likelihood of the accused absconding.
- **Health Grounds:** The court may consider the accused's age, medical condition, etc.
- **Length of Detention:** Excessive periods of detention without trial may sometimes lean towards granting bail.

Unlawful Activities (Prevention) Act (UAPA)

Purpose

- India's primary anti-terrorism legislation. It aims to prevent "unlawful activities" as defined in the Act, combat terrorism, and provide measures for the punishment of those involved.

Definition of "Unlawful Activity"

- Broadly refers to any action (by word or deed) that:
 - Threatens the unity, integrity, security, or sovereignty of India.
 - Creates a sense of disaffection against India.
 - Disrupts communal or social harmony

Powers Granted by UAPA

- **Declaration of Unlawful Associations:** The government can declare an association "unlawful" if it's involved in unlawful activities.
- **Power to Arrest and Detain:** Law enforcement agencies have extended powers to arrest suspected individuals with fewer procedural safeguards than regular criminal cases.
- **Extended Pre-trial Detention:** Accused individuals can be detained for up to 180 days without a charge sheet.
- **Restrictions on Bail:** Makes obtaining bail exceptionally difficult.

- **Creation of Special Tribunals:** Establishes special tribunals to handle UAPA cases.
- **Designating Individuals as Terrorists**
- The central government has the authority to designate individuals as terrorists if it believes they are involved in terrorist activities.

Penalties

- Penalties under the UAPA are severe, including:
 - Imprisonment for terms ranging from a few years to life imprisonment.
 - Death penalty in cases where unlawful activity results in death.

Bail

- **Harsh Provisions:** Sec. 43D (5) creates a presumption of guilt against the accused, making bail incredibly difficult.
- **Burden of Proof:** The burden rests on the accused to prove that the charges are not *prima facie* true.

Amendments

- The UAPA has been amended several times, expanding the scope of what constitutes a terrorist act and increasing the government's power.

Criticisms

- **Overbroad Definition of Terrorism:** Its vague definition leaves it open to misuse.
- **Potential for Abuse:** Used to silence dissent and target minorities or political opponents.
- **Harsh Bail Conditions:** Violates the presumption of innocence, leading to prolonged detention even before trial.

Conclusion

- The UAPA, India's anti-terrorism law, aims to prevent and punish unlawful activities threatening national security. It grants broad powers to authorities but raises concerns about its potential misuse and challenges in obtaining bail, sparking debate on its balance between security and individual rights.

APAAR

Context

- The National Conference on APAAR: One Nation One Student ID Card was inaugurated

by the Union Minister of Education and Skill Development & Entrepreneurship.

Automated Permanent Academic Account Registry (APAAR)

- The Automated Permanent Academic Account Registry (APAAR) is an innovative initiative introduced by the Union Education Ministry in India.
- It serves as a **unique identification system under the broader Education Ecosystem Registry**, commonly known as EduLocker. Referred to as 'One Nation, One ID,' APAAR's **primary objective is to create a unique identification number for every student in India**, covering their educational journey from pre-primary to higher education.

Objectives of APAAR

- **Unique Identification:** Assign a **12-digit unique identification number to every student in India, linking it with their Aadhaar number** for accurate identification and reducing the chances of duplication.
- **Comprehensive Database:** Create a centralized database tracking a student's academic progress, offering a unified record system from early education to higher studies.

Functionality and Features

- **Streamlined Admission Process:** Facilitate smoother transitions between institutions by providing the APAAR ID instead of physically transferring academic records.
- **Electronic Record Keeping:** Eliminate the need for physical copies of academic records, reducing paperwork for both students and institutions.
- **Transparency:** Provide a single view of a student's academic progress, including grades, attendance, and achievements, promoting transparency and allowing students to identify areas for improvement.
- **Standardized Record-Keeping:** Facilitate student mobility across institutions and regions with a standardized record-keeping system, ensuring uninterrupted education.

Benefits for Students

- **Simplified Transfers:** Ease the transfer process between institutions, making

academic records readily accessible and reducing admission-related hassles.

- **Secure Data Storage:** Eliminate concerns about losing or damaging physical documents, as academic history is securely stored online.
- **Personalized Learning:** Access to transparent academic data allows students to identify weak points and focus on areas that need improvement for more personalized and effective learning experiences.

Benefits for Educational Institutions

- **Administrative Efficiency:** Automate administrative tasks like verifying student transcripts and issuing certificates, reducing the burden on administrative staff.
- **Accurate Record-Keeping:** Minimize errors and discrepancies in student records, ensuring accuracy and reliability for decision-making.
- **Research Opportunities:** Leverage APAAR data for research purposes, studying student progress patterns, and developing strategies to enhance the overall educational experience.

Benefits for the Government

- **Data-Driven Decision-Making:** Real-time data from APAAR enables data-driven decisions in educational planning and policy formulation.
- **Tailored Support Programs:** Identify students from marginalized backgrounds or regions with specific needs, tailoring educational support programs to promote equal access and bridge gaps in education.
- **Privacy Measures:** Ensure strong privacy measures, allowing students control over who accesses their academic data and addressing privacy concerns.

Conclusion

- APAAR, aligned with the National Education Policy, signifies a digital revolution in India's education system. By fostering efficiency, transparency, and equal access to educational opportunities, APAAR aligns with the vision of a modern, technology-driven educational ecosystem in India. It not only benefits students and educational institutions but also empowers the government to make informed decisions for the betterment of the education sector.

Registration of NRI, OCI Marriages

Context

- The 22nd Law Commission recommends that marriages involving Non-Resident Indians (NRI) and Overseas Citizens of India (OCI) must be mandatorily registered, with a specific focus on addressing the challenges faced by Indian women deserted by their NRI or OCI spouses.

Details

- The Law Commission of India has proposed significant changes in its 287th report to address the increasing concerns surrounding fraudulent marriages involving Non-Resident Indians (NRIs) and Overseas Citizens of India (OCIs). These changes aim to protect Indian citizens, particularly women, who have been victims of such practices.

Key Recommendations

- **Mandatory Registration:** The report proposes making the registration of all marriages between NRIs/OCIs and Indian citizens mandatory. This expands upon the existing "Registration of Marriage of Non-Resident Indians Bill, 2019" by including OCIs and introducing new provisions.
- **New Registration Procedure:** This includes requiring couples to provide prior notice to the district Marriage Officer. This notice will be displayed publicly for 30 days, allowing anyone to raise objections to the marriage.
- **Penalties for Non-Compliance:** The report outlines penalties for failing to register various aspects, including divorce, maintenance, child support, and non-compliance with summons or warrants.
- **Addressing Vulnerability:** These recommendations stem from concerns about women being deserted, abused, or financially exploited by NRI/OCI spouses after marrying based on false promises. This often leaves them with limited legal recourse, especially when residing abroad.
- **Passport Amendments:** The Law Commission suggests amending the Passport Act to require declaring marital status in passports.

- **Centralized Registry:** The report proposes establishing a separate division within the Ministry of Home Affairs or External Affairs to serve as a central registry for NRI and OCI marriages.

Rationale

- The Law Commission highlights the increasing number of fraudulent marriages involving NRIs and OCIs. They emphasize how women are particularly vulnerable due to the allure of improved social security, education, and career opportunities. This report aims to mitigate these risks by:
 - **Enhancing transparency:** Mandatory registration and public notice periods allow for potential red flags to be identified.
 - **Strengthening legal recourse:** A central registry and clear legal procedures can ease access to justice for victims of fraudulent marriages.
 - **Deterring future occurrences:** The proposed measures aim to discourage individuals from engaging in fraudulent activities.

Potential Implications

- **Enhanced Protection:** This move offers greater protection for Indian citizens, especially women, who marry NRIs/OCIs, by reducing the risk of desertion, financial exploitation, and other forms of abuse.
- **Greater Transparency:** Mandatory registration, public notices, and passport declarations bring more transparency to the process of NRI/OCI marriages, helping to identify potential fraudulent unions before they happen.
- **Improved Legal Mechanisms:** With mandatory registration and a central database, the legal system will be better equipped to deal with cases of desertion, non-payment of maintenance, or other legal issues arising from such marriages.

- **Potential Bureaucracy:** Some critics worry this might create a more complex bureaucratic process for legitimate NRI/OCI marriages.

Law Commission of India

- Established as an **executive body** by the Government of India.
- Advises the government on legal reforms through research and recommendations.
- Composed of legal experts and headed by a retired judge.
- Functions on a fixed-term basis as an advisory body to the Ministry of Law and Justice.
- First established in 1833, under British colonial rule, by the East India Company. Four commissions were established during British India.
- The first commission of independent India was formed in 1955. Since then, twenty-two commissions have been constituted.

Conclusion

- The Law Commission's recommendations aim to improve legal safeguards for Indian citizens, particularly women, entering marriages with NRIs and OCIs. By requiring mandatory registration, providing a period for objections, and establishing a dedicated registry, the proposal seeks to deter fraudulent marriages and offer better protection to vulnerable individuals.

Sangam: Digital Twin Initiative

Context

- The Department of Telecommunications (DoT) in India has launched a pioneering initiative called "Sangam: Digital Twin." This initiative aims to revolutionize infrastructure planning and design by harnessing the power of digital twin technology.

Purpose and Scope

- **Leveraging Digital Twins:** Sangam utilizes digital twins, virtual replicas of physical assets, to enable real-time monitoring, simulation, and analysis for improved decision-making.
- **The initiative comprises two stages:**
 - **Exploration:** Encourages creative exploration to unlock the potential of digital twins.
 - **Demonstration:** Focuses on implementing specific use cases in a major city, generating a blueprint for future scalability and replication.

Objectives

- **Demonstrate practical applications:** Showcase real-world implementation of innovative solutions for infrastructure planning.
- **Develop a collaboration framework:** Create a model that facilitates faster and more effective collaboration across stakeholders.

- **Provide a future blueprint:** Generate a roadmap for scaling and replicating successful strategies in future infrastructure projects.

Key Components of Digital Twins

- **Physical Asset:** The real-world entity (e.g., machinery, infrastructure, city) for which a digital twin is created.
- **Virtual Model:** A digital representation built using advanced modelling and simulation techniques, incorporating data to reflect the asset's characteristics and behaviour.
- **Sensors and IoT Devices:** Collect real-time data (temperature, pressure, vibration) from the physical asset to update the virtual model and provide performance insights.
- **Data Analytics and Machine Learning:** Analyze vast amounts of data to derive actionable insights for optimization, predictive maintenance, and informed decision-making.
- **Connectivity and Integration:** Ensure seamless connection and data flow between the virtual model, IoT devices, enterprise systems, and external data sources to maintain real-time accuracy.

Applications of Digital Twin Technology

- **Manufacturing and Industry 4.0:** Optimize production processes, predict maintenance needs, and enable proactive maintenance for reduced downtime and improved efficiency.
- **Smart Cities and Infrastructure:** Model and simulate entire cities or specific infrastructure

components for optimized traffic flow, energy management, and enhanced public safety.

- **Healthcare:** Create personalized patient models for diagnosis, treatment planning, and research, enabling precision medicine and improved patient outcomes.
- **Aerospace and Defense:** Simulate aircraft performance, optimize maintenance schedules, and enhance mission planning for proactive maintenance, reduced costs, and improved operational readiness.
- **Energy and Utilities:** Monitor and optimize energy generation, distribution, and consumption, facilitating predictive maintenance, grid resilience, and the transition to renewable energy sources.

Challenges and Considerations

- **Data Privacy and Security:** Ensuring the privacy and security of sensitive information associated with digital twins is crucial.
- **Interoperability and Standards:** Establishing interoperability standards for digital twins and ensuring compatibility with existing systems and data sources remains a challenge.
- **Scalability and Complexity:** Managing the complexity and scalability of sophisticated digital twins encompassing larger and more intricate systems is a concern.
- **Ethical and Regulatory Considerations:** Addressing ethical concerns related to accountability, transparency, and fairness in the use of digital twins is essential.

Conclusion

- "Sangam: Digital Twin" is a collaborative effort towards reshaping infrastructure planning and design in India. By fostering cross-sectoral collaboration and leveraging advanced technologies, Sangam aims to drive impactful changes and pave the way for a smarter and more sustainable future.

Smart Gram Panchayat

Context

- The pilot project 'Smart Gram Panchayat: Revolution towards Digitization of Gram Panchayat' was launched by the Union

Minister of Rural Development and Panchayati Raj in Begusarai District, Bihar.

Key Highlights

- **PM-WANI Service Extension:** The project aims to extend the Prime Minister's Wi-Fi Access Network Interface (PM-WANI) Service to all Gram Panchayats across Begusarai District, making it the first district in Bihar to provide Wi-Fi services to all its Gram Panchayats under the PM-WANI Scheme.
- **Digital Empowerment:** The Minister emphasized the importance of leveraging technology for the betterment and development of rural communities. He highlighted various schemes introduced by the Central Government aimed at empowering rural areas through digital initiatives.
- **Embracing Technology:** The minister stressed the need for Panchayat representatives and functionaries to embrace technology for the empowerment, growth, and holistic development of Gram Panchayats. He urged everyone to adopt technology as an integral part of their lives, emphasizing its transformative impact.
- **Inclusive Growth:** With the launch of Wi-Fi services in Gram Panchayats, the government envisions positive changes across various aspects of rural life. He reaffirmed the government's commitment to ensuring inclusive growth, including the ambitious goal of making 3 crore women 'Lakshpati Didis.'
- **Transformative Power of Technology:** He called upon local residents and Panchayat representatives to work cohesively towards the all-round development of their villages with the use of technology. He highlighted the transformative power of technology in gradually elevating villages towards becoming Smart Panchayats and smart communities.
- **Socio-economic Transformation:** He expressed optimism for the socio-economic transformation facilitated by ubiquitous internet connectivity. The inauguration of the pilot project stands as a testament to the government's dedication to bridging the

digital divide and fostering socio-economic development in rural India.

Significance of the Project

- This project signifies a significant leap towards digital empowerment in rural India (Grameen Bharat).
- It highlights the government's commitment to bridging the digital divide and fostering socio-economic development in rural areas.
- Wi-Fi access in Gram Panchayats is expected to bring positive changes in various aspects of rural life, including:
 - **Education:** Facilitating online learning and access to educational resources.
 - **Healthcare:** Enabling telemedicine consultations and improving access to health information.
 - **Agriculture:** Providing farmers with information on market prices, weather forecasts, and best practices.
 - **E-governance:** Simplifying access to government services and promoting transparency.
 - **Skill development:** Offering opportunities for online skill training and education.
 - **Economic opportunities:** Supporting the growth of rural businesses and entrepreneurship.

About PM-WANI (Prime Minister's Wi-Fi Access Network Interface)

Goal

- To significantly expand the availability and affordability of public Wi-Fi networks, promoting widespread internet access in India and bridging the digital divide, especially in rural and underserved regions.

Model

- PM-WANI follows a decentralized, collaborative architecture reducing bureaucratic barriers. Key stakeholders include:
 - **Public Data Offices (PDOs):** Entities (small shops, businesses, etc.) that set up and operate Wi-Fi hotspots.
 - **Public Data Office Aggregators (PDOAs):** Provide authorization, accounting, and aggregation services to PDOs.

- **App Providers:** Develop apps to help users discover PM-WANI hotspots and register.
- **Central Registry:** Maintains a database of stakeholders within the ecosystem.

Key Features

- **No License or Fees:** Eliminates the need for licenses or government fees for setting up PDOs.
- **Ease of Setup:** No mandatory registration process, making it easy for small establishments to participate.
- **Interoperability:** Promotes seamless communication between different stakeholders within the PM-WANI framework.

How It Works

- **PDO Establishment:** An individual or business sets up a Wi-Fi hotspot and associates with a PDOA.
- **User Discovery:** Users find PM-WANI hotspots through the dedicated app.
- **Authentication:** Users register and authenticate within the app.
- **Connectivity:** Users can purchase affordable data vouchers from the PDO to access the internet.

Benefits

- **Increased Internet Access:** Expands public Wi-Fi, especially in underserved areas.
- **Economic Growth:** Opens up entrepreneurial opportunities for small businesses.
- **Enhanced Digital Inclusion:** Promotes digital literacy and online participation.
- **Supports Digital India Initiative:** Advances the national goal of a digitally-enabled society.

Conclusion

- The Initiative aims to empower Gram Panchayats with reliable Wi-Fi internet services, facilitating various developmental initiatives and fostering inclusive growth in rural areas. The Ministry of Panchayati Raj's initiative aims to contribute meaningfully to the vision of a digitally empowered India where every individual has access to opportunities for growth and prosperity.

Right to Adopt

Context

- The Delhi High Court has recently ruled in favour of the Central government's adoption regulations, specifically the provision that restricts couples with two or more biological children from adopting a "normal" child.

The Adoption Regulations, 2022, implemented by the Central government, **restrict couples with two or more biological children from adopting "normal" children (meaning children without special needs)**. This replaced the 2017 regulations allowing such couples to adopt a third child irrespective of biological offspring.

Court's Reasoning

- **Reducing Wait Times:** The court highlighted a significant imbalance between the number of "normal" children available and the high number of couples seeking to adopt them. This imbalance leads to extended wait times for all children, especially those without a chance of finding a family quickly. The regulations aim to decrease these wait times for all children by prioritizing families with fewer existing children.
- **No Fundamental Right to Adopt:** The court clarified that the right to adopt isn't a fundamental right enshrined in the Indian Constitution. Prospective adoptive parents don't have an absolute right to choose who they adopt.
- **Balancing Demand and Supply:** The regulations aim to create a more equitable system by addressing the mismatch between available children and adoptive parents seeking "normal" children. This creates more opportunities for children with special needs or those considered "hard to place" to find loving families.

Criticisms and Concerns

- **Retroactive Application:** The regulations were applied retrospectively, impacting couples who initiated adoption procedures under the previous 2017 rules, which allowed them to adopt a third child regardless of their biological children.
- **Limited Parental Choice:** Restricting options for couples with two biological children may affect their desire to expand their family in a particular way.

Right to Adopt in India

Not a Fundamental Right

- The Delhi High Court has ruled that the right to adopt is not a fundamental right under Article 21 of the Indian Constitution.

Eligibility

- Anyone, irrespective of marital status, religion, or whether they have biological children, can adopt in India, subject to certain conditions.

Conditions for Prospective Adoptive Parents (PAPs)

- **Marital Status:** Married couples require consent from both spouses. Single females can adopt, but single males cannot adopt girl children.
- **Age:** PAPs must be at least 25 years old and at least 21 years older than the child they wish to adopt.
- **Financial Stability:** PAPs must be financially capable of providing for the child's needs.
- **Health:** PAPs must be physically and mentally healthy to care for the child.
- **Criminal History:** PAPs cannot have a criminal record related to child rights violations.

Adoption Process

- PAPs must register with the Central Adoption Resource Authority (CARA) and undergo an evaluation process. They are then matched with a suitable child based on their preferences and the child's needs.

Legal Framework

- The Juvenile Justice (Care and Protection of Children) Act, 2015, and the Adoption Regulations, 2017, govern adoption in India.

Additional Considerations

- The **primary focus is on the welfare of the child**. PAPs do not have the right to choose the specific child they want to adopt. Regulations exist regarding the number of children a couple can adopt and the age of the child.

Conclusion

- The Delhi HC's decision emphasizes child welfare by streamlining the adoption process and reducing wait times for all children. However, it raises concerns about parental choice and the needs of adoptive families, particularly those adopting children with special needs. A multifaceted approach is needed, balancing child well-being with parental aspirations while fostering a more transparent and supportive adoption system.

Assam repeals Muslim Marriage Act

Context

- The Assam government has decided to repeal the state's Muslim Marriage Act, which was enacted in 1935 and mandates the registration of Muslim marriages and divorces.

What was the Assam Muslim Marriage and Divorce Registration Act, 1935?

- The Act established a **system for registering Muslim marriages and divorces in Assam**. This meant marriages and divorces needed to be officially documented.
- It authorized the state to license Muslim registrars, also known as Kazis, to perform marriages and handle divorces.
- The Act was seen as aligning with Muslim personal law, a set of religious principles governing family matters.

Government's Rationale for Repeal

- **Curbing Child Marriage:** The government argues that the Act allows registering marriages of minors. Assam, like all of India, has a legal minimum marriage age (18 for women and 21 for men). They believe the Act's provision allowing guardians to register marriages on behalf of minors facilitates child marriage.
- **Modernization and Uniformity:** The government views the Act as outdated and inefficient. They want to replace it with the Special Marriage Act, a centralized system seen as more streamlined. This move is also

seen as a step towards a Uniform Civil Code (UCC), a national system of civil laws proposed by the BJP government.

Criticisms and Concerns

- **Ineffective for Stopping Child Marriage:** Critics argue that the government could have amended the Act to address child marriage by specifying only marriages of legal adults could be registered. They believe a complete repeal might lead to more unregistered marriages, potentially making it harder to track child marriages.
- **Increased Complexity:** Replacing the existing system with the Special Marriage Act might discourage registration. The Special Marriage Act requires a longer notice period, more documentation, and involves the District Commissioner's office, which can be more complex and bureaucratic, especially for rural and underprivileged communities.
- **Targeting a Community:** Critics see the repeal as targeting the Assamese Muslim community, a significant portion of the population (around 34%).

What are the potential impacts of repealing the act?

- **Uncertainty and confusion:** Repealing the act without a clear alternative system for registration might create confusion and uncertainty for Muslims in Assam regarding the legal validity of their marriages and divorces.
- **Increased burden on courts:** The existing court system might face an increased burden

due to the potential surge in litigation related to unregistered marriages and divorces.

- **Social and religious concerns:** The Muslim community in Assam may perceive the repeal as an attack on their religious customs and traditions, potentially leading to social tensions.

Conclusion

- The repeal of the AMMDRA is a controversial move with both potential benefits and drawbacks. While the government's stated aim of preventing child marriages is important, the effectiveness and potential negative consequences of the repeal need careful consideration.

Regional Benches of the Supreme Court

Context

- The Union Law Ministry has accepted the recommendation from the Parliamentary Standing Committee to establish regional benches of the Supreme Court across India, aiming to address geographical biases and enhance accessibility to justice.

Regional Benches of the Supreme Court

- The concept of establishing Regional Benches of the Supreme Court in India has been a topic of discussion for a long time. Proponents argue that it would improve access to justice for citizens across the vast nation, while opponents raise concerns about potential inconsistencies and a dilution of the apex court's authority.

Arguments in Favor of Regional Benches

- **Increased Accessibility:** Regional benches would bring the Supreme Court closer to people residing in far-flung areas, reducing the financial burden and time required to

travel to Delhi for hearings. This could be particularly beneficial for those with limited resources.

- **Reduced Caseload:** By decentralizing the workload, regional benches could potentially help manage the ever-increasing number of cases pending before the Supreme Court in Delhi. This could lead to faster resolution of cases.
- **Focus on Regional Issues:** Regional benches could provide a platform for judges with expertise in specific legal issues relevant to their regions. This could lead to more informed decisions on matters specific to those areas.
- **Federalism:** Proponents argue that regional benches would strengthen India's federal structure by ensuring representation from various parts of the country in the highest court.

Arguments against Regional Benches

- **Uniformity of Law:** Critics argue that establishing regional benches could lead to inconsistencies in judicial pronouncements across different regions. This could potentially undermine the principle of a single, unified judicial system for the entire nation.
- **Dilution of Authority:** Some believe that regional benches might dilute the authority and stature of the Supreme Court as the apex court of the land.
- **Logistical Challenges:** Setting up and maintaining regional benches would require significant resources for infrastructure, staffing, and logistics.
- **Selection of Judges:** Concerns exist regarding the potential politicization of the selection process for judges in regional benches.

Current Situation

- **Article 130 of the Indian Constitution empowers the Chief Justice of India, with the President's approval, to establish regional benches at specific places.** However, no such benches have been formally established yet.
- A Parliamentary Committee has previously recommended setting up regional benches, but no concrete action has been taken.

Way Forward

- **A well-defined framework:** Clear guidelines and criteria for establishing regional benches, ensuring a balance between accessibility and uniformity of law.
- **Technology Integration:** Leveraging video conferencing and other technologies could potentially improve access to justice without establishing physical benches in every region.
- **Focus on Judicial Reforms:** Streamlining court procedures and increasing judicial capacity could address the issue of case backlog without geographical decentralization.

Conclusion

- The concept of regional benches for the Supreme Court remains a topic of debate. While the potential benefits of increased accessibility and focus on regional issues are undeniable, concerns regarding consistency and dilution of authority need to be addressed. Finding a solution that balances these considerations is crucial for ensuring a robust and accessible judicial system for all citizens of India.

Flood Management and Border Areas Programme

Context

- The Union Cabinet has approved the continuation of the Flood Management and Border Areas Programme (FMBAP) for the period 2021-2026, focusing on critical aspects of flood control and anti-erosion measures.

Details

- The Flood Management and Border Areas Programme (FMBAP) is a Government of India initiative launched to **address two key national concerns: flood control and management in the entire country, and river management activities and border area development along India's borders with neighbouring countries.**

Flood Management Component (FMP)

- **Provides central financial assistance to state governments** for undertaking various flood management and control works. Examples of activities funded under FMP include:
 - Construction of embankments and drainage systems
 - River dredging and desilting
 - Anti-sea erosion measures
 - Restoration of damaged flood management works
- **Funding patterns for FMP projects can vary depending on the state**, with some receiving 70% central assistance and others being required to contribute 30%.

River Management and Border Areas Component (RMBA)

- Focuses on activities related to border areas and common border rivers with neighbouring countries. Activities undertaken under RMBA include:
 - Hydrological observations and flood forecasting on common border rivers
 - Investigation of water resources projects in neighbouring countries
 - Pre-construction activities for water resources projects on common border rivers
 - Activities of the Ganga Flood Control Commission (GFCC)
- **Funded entirely by the central government (100% central assistance).**

Objectives of FMBAP

- **Reduce Flood Risks:** The program aims to minimize loss of life, property, and infrastructure damage caused by floods across the country.
- **Protect Land and Infrastructure:** By funding flood control and anti-erosion works, FMBAP seeks to safeguard valuable land from erosion and flooding.
- **Enhance Border Security:** Activities under RMBA contribute to improved management of common border rivers and potentially enhance border security through cooperation with neighbouring countries.
- **Promote Sustainable Development:** FMBAP can contribute to sustainable development by protecting land for agriculture and

infrastructure, and minimizing flood-related disruptions to economic activity.

Benefits of FMBAP

- **Improved Public Safety:** By reducing flood risks, FMBAP helps protect the lives and livelihoods of people living in flood-prone areas.
- **Economic Benefits:** Effective flood management protects infrastructure and agricultural land, minimizing economic losses caused by floods.
- **Enhanced Regional Cooperation:** The RMBA component fosters cooperation with neighbouring countries on water resource management, potentially leading to regional benefits.

Challenges and Considerations

- **Climate Change:** The increasing frequency and intensity of extreme weather events due to climate change pose new challenges for flood management.
- **Effective Implementation:** The success of FMBAP hinges on efficient planning, execution, and maintenance of flood control projects by state governments.
- **Balancing Interests:** Balancing the needs of flood control with environmental considerations and the livelihoods of communities dependent on rivers requires careful planning.

Conclusion

- The extension of FMBAP signifies the government's multi-pronged approach to tackling floods and their impact. By providing financial aid to states, promoting technological advancements, and focusing on border areas, the program aims to enhance India's preparedness and resilience against floods, ensuring the safety and well-being of its citizens.

Parliamentary Privileges

Context

- There have been ongoing concerns regarding the potential misuse of Parliamentary privileges.

Parliamentary Privileges in India

- Parliamentary privileges are special rights, immunities, and exemptions enjoyed by the two Houses of Parliament (Lok Sabha and Rajya Sabha), their committees, and their members.
- These privileges are essential for the smooth functioning of the Parliament and to ensure that Members of Parliament (MPs) can perform their duties without fear or hindrance.

Sources of Parliamentary Privileges

- **The Constitution of India:** Article 105 for Lok Sabha and Article 194 for Rajya Sabha provide the foundation for parliamentary privileges. These articles grant MPs freedom of speech in Parliament and immunity from proceedings in any court for anything said or any vote given in Parliament or its committees.
- **Parliamentary Conventions:** Unwritten customs and practices established over time also define some privileges. These conventions are based on precedents set by the British Parliament and adapted to the Indian context.
- **Laws Made by Parliament:** Certain privileges are defined in specific laws passed by the Parliament, such as the Salaries and Allowances of Members of Parliament Act, 1954.
- **Rules of Lok Sabha and Rajya Sabha:** The respective rulebooks of each House outline specific privileges and procedures related to them.

Types of Parliamentary Privileges

Privileges Relating to Individual Members

- **Freedom of Speech:** MPs have the right to express their views freely in Parliament without fear of arrest or legal action. This allows for robust debate and scrutiny of the government.
- **Immunity from Proceedings:** MPs cannot be arrested or sued for anything said or any vote given in Parliament or its committees. This protects them from intimidation and allows them to perform their duties without fear.

- **Exemption from Jury Service:** MPs are exempted from jury duty so they can focus on their parliamentary work.

Privileges relating to the Houses of Parliament

- **Right to Publish Proceedings:** Each House has the right to publish its proceedings without being questioned in any court. This ensures transparency and public access to parliamentary activities.
- **Right to Exclude Strangers:** The Houses can exclude strangers (non-members) from their proceedings if they deem it necessary. This allows for confidential discussions and protects the integrity of sensitive matters.
- **Right to Regulate its own Procedure:** Each House has the right to make its own rules and regulations regarding its functioning. This autonomy allows them to adapt procedures to changing circumstances.
- **Power to Punish for Contempt:** The Houses have the power to punish anyone who commits contempt of Parliament, which includes actions that undermine their authority or dignity. This power is used to maintain order and decorum within the Houses.

Importance of Parliamentary Privileges

- **Ensures Freedom of Speech:** Protects MPs from expressing views critical of the government or powerful individuals. This is essential for a healthy democracy.
- **Protects Independence of Parliament:** Shields Parliament from external interference

and allows it to hold the government accountable without fear.

- **Maintains Order and Decorum:** Allows the Houses to function effectively by ensuring proper conduct and preventing disruptions.
- **Upholds Dignity of Members:** Provides MPs with a sense of security and allows them to perform their duties diligently.

Criticisms and Concerns

- **Potential for Abuse:** Some argue that broad privileges can be misused by MPs to avoid accountability for their actions outside Parliament.
- **Limited Judicial Review:** The courts have limited power to intervene in matters of parliamentary privilege, which can raise concerns about unchecked power.
- **Erosion of Privileges:** Over time, some argue, the scope of privileges has been stretched too far, undermining their original purpose.

Conclusion

- Parliamentary privileges are a cornerstone of a functioning democracy. They allow for robust debate, ensure the independence of Parliament, and protect MPs from undue interference. However, it's important to maintain a balance between ensuring the smooth functioning of Parliament and ensuring accountability of its members. Ongoing discussions and reforms can help to ensure that parliamentary privileges continue to serve their intended purpose effectively.

1.9 SNIPPETS



Public Examinations (Prevention of Unfair Means) Bill

- It aims to prevent cheating in job recruitment exams by addressing the use of unfair means and ensuring transparency, fairness, and credibility in public examination systems.
- It lists 15 actions considered unfair means, including leakage of question papers, tampering with answer sheets, providing solutions by unauthorized persons, and conducting fake examinations.
- It specifies offences as cognizable, non-bailable, and non-compoundable. Punishments include imprisonment for three to five years and a fine of up to Rs 10 lakh.
- Harsher penalties for organized paper leaks, with imprisonment of up to ten years and a fine of not less than one crore rupees.



OBC Quota in J&k Local Bodies

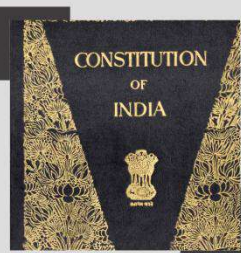
- It aims to provide reservation to Other Backward Classes (OBCs) in panchayats and municipal bodies of Jammu and Kashmir.
- A commission, formed post-legislation, will determine the number of seats reserved for OBCs in panchayats and municipalities. Presently, there is no OBC reservation in these bodies in the Union Territory.
- It seeks to amend provisions of the J&K Panchayati Raj Act, 1989, J&K Municipal Act, 2000, and J&K Municipal Corporation Act, 2000 to align with Part IX and Part IXA of the Constitution related to "Panchayats" and "Municipalities."
- Referring to Articles 243D and 243T, the Bill emphasizes that the Acts of the Union Territory lack provisions for OBC reservation, while the Constitution empowers states to reserve seats for backward classes in Panchayats and Municipalities.
- Articles 243K and 243ZA of the Constitution vest superintendence, direction, and control of electoral rolls and election conduct in a State Election Commission. The Bill aims to address variances in the J&K Panchayati Raj Act and Municipal laws.



Lakhpati Didi Scheme

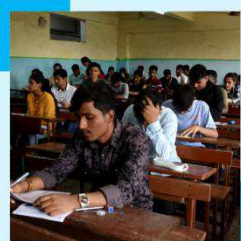
Lakhpati Didi Scheme

- The Union Finance Minister announced the expansion of the Lakhpati Didi Scheme in her Interim Budget 2024–25 speech.
- It aims to empower women by encouraging them to start micro-enterprises. It provides training in various skills such as plumbing, LED bulb making, drone operation and repair, tailoring, and weaving. The goal is to enable women to earn a sustainable income of at least ₹1 lakh per annum.
- Participants in the Lakhpati Didi Scheme must be active members of self-help groups, primarily focusing on women.
- Required Documents: Domicile certificate, Aadhar card, Ration card, Proof of income, Bank details



Article 142

- Article 142 of the Indian Constitution empowers the Supreme Court for doing complete justice in cases where laws are silent or inadequate.
- It can be used to fill gaps in legislation, issue orders for enforcing fundamental rights, and deliver justice in the absence of specific laws.
- Applicable to both civil and criminal cases.
- It must be consistent with other provisions of the Constitution, ensuring conformity with the constitutional framework.
- Allows flexibility in applying principles of equity and justice based on the specific circumstances of each case
- Reflects a delicate balance between the separation of powers and the need for the judiciary to address situations not covered by legislation.



Greening India's Wastelands with Agroforestry (GROW) Initiative

- A multi-institutional initiative launched by NITI Aayog to promote agroforestry for greening and restoring wastelands in India.
- It allows universal access to detailed state and district-level data, facilitating broad information availability.
- It aligned with national goals to restore 26 million hectares of degraded land by 2030, contributing to a significant carbon sink.
- It utilizes advanced technologies like remote sensing and GIS, the project developed an Agroforestry Suitability Index (ASI) for prioritizing greening and restoration projects nationally.
- The system generates district-level wasteland information, area prioritization, live maps, area analysis-statistic reports, and offers an interactive mode for adaptable weightage handling, enhancing decision-making flexibility.




Swachhata Green Leaf Rating

- It was launched by the Union Tourism Ministry to ensure hygiene in hospitality.
- It aims to encourage sanitation in hotels, lodges, and more. Targets hotels, homestays, 'Dharamshalas,' and camps.
- State teams to organize workshops on sanitation practices. Public participation is envisioned for cleaner and sustainable tourism.
- It proposed a three-tiered committee system for implementation. Includes Verification Sub-Committee, District Committee, and State-level Committee for effective on-ground verification and oversight.
- Government to provide incentives to boost participation. Focus on rural areas for awareness and low-cost technology assistance to hospitality units.




Safe City Project

- It is an initiative under the Nirbhaya Fund scheme by the Government of India, that aims to create a safe environment for women and children in public spaces.
- It aims to prevent and curb crimes against women and children. Provide safer urban infrastructure and efficient access to law enforcement. Empower women to pursue opportunities without fear.
- Initially implemented in eight cities: Delhi, Mumbai, Kolkata, Chennai, Bengaluru, Hyderabad, Ahmedabad, and Lucknow.
- Key Components: Infrastructure development, Technology adoption, Capacity building.
- Centrally sponsored by the Government of India, with shared funding (60:40 ratio) between the central government and concerned states.



Nazool Land

- In Haldwani (Uttarakhand) a recent violence-triggering demolition drive targeted structures allegedly on Nazool land.
- Nazool land refers to property primarily owned by the government, often acquired from kings and royals during British rule and marked as state-owned post-independence.
- It is generally not directly administered as state property. Instead, the government leases nazool land to individuals, organizations, or institutions for a fixed period, typically ranging from 15 to 99 years.
- The management of nazool land falls under the purview of the revenue department of the respective state government.



PM Surya Ghar Muft Bijli Yojana

- A scheme launched by the Indian government to provide free electricity to eligible households through the installation of rooftop solar panels.
- The Yojana provides 300 free electricity units monthly for sustainable development, benefiting 1 crore households with ₹75,000 crores government investment.
- Indian citizens with an annual income below ₹1.5 lakh, no government employment, and a linked Aadhaar-linked bank account can apply for reduced bills and income opportunities.
- The government provides a subsidy to help cover the cost of installing rooftop solar systems. This subsidy can cover up to 40% of the total cost.
- Free power, decreased bills, income generation, and job opportunities in solar-related fields contribute to the scheme's success.

Debt Recovery Tribunal



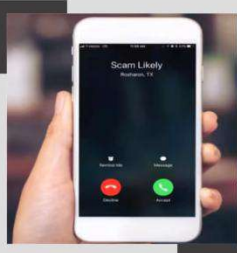
- DRTs are quasi-judicial bodies established under the Recovery of Debts Due to Banks and Financial Institutions (RDDBFI) Act, 1993.
- They are specifically designed to provide a faster and more efficient mechanism for banks and financial institutions (FIs) to recover their non-performing assets (NPAs) or bad debts.
- DRTs hear and decide applications filed by banks and FIs for the recovery of debts that exceed a specific threshold (currently ₹20 lakh).
- A Presiding Officer, appointed by the Central Government, heads each DRT. The Presiding Officer must have qualifications similar to a District Judge. DRTs may also have Recovery Officers to assist in the recovery process.
- Debts Recovery Appellate Tribunals (DRATs) serve as the appellate authority for appeals against orders passed by DRTs. DRATs are chaired by a Chairperson who should have the qualifications of a High Court Judge.

Adjournment



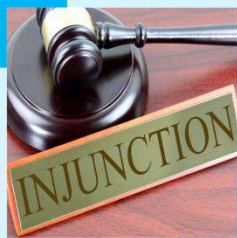
- A circular issued by the Supreme Court specifies restrictions on the granting of adjournments, particularly in bail and anticipatory bail cases where notice had been previously issued by the court.
- In legal terms, an adjournment is a temporary suspension or postponement of a court hearing or trial to a later date. It can occur at various stages of a case.
- Parties are not permitted to orally request an advance of the hearing date, and the specific date for the hearing will be provided to the parties.

Calling Name Presentation



- The Telecom Regulatory Authority of India (TRAI) has recently recommended that all network operators in the country implement Calling Name Presentation (CNAP), also known as Caller ID, for mobile phone users.
- This means that when someone makes a call, their name or other identifying information (usually associated with the phone number) will be displayed on the recipient's phone screen.
- Knowing the caller's identity can be crucial for safety and security, especially for vulnerable individuals like the elderly or children. It allows them to be more cautious when answering calls from unknown numbers, potentially avoiding unwanted conversations or scams.

Injunction



- The Supreme Court of India has ruled that a plaintiff (the person filing the lawsuit) cannot seek an injunction (a court order prohibiting an action) against a defendant (the person being sued) if the plaintiff fails to prove their legal ownership of the property in question.
- An injunction is a court order issued to prevent someone from doing something (prohibitory injunction) or compel them to do something (mandatory injunction). In property disputes, injunctions are typically sought as prohibitory measures.

1.10 1 MAINS & 5 MCQs

Q1. Panchayati Raj Institutions (PRIs) are often criticized for being fiscally dependent on the state government. How can they achieve a balance between greater fiscal autonomy and

accountability, while ensuring access to necessary resources for effective governance?

Structure:

- **Introduction:** Start by defining Panchayati Raj Institutions (PRIs) and highlighting their significance in decentralized governance. Mention the prevalent criticism regarding their fiscal dependency on the state government.
- **Challenges Faced by PRIs:** Discuss the reasons behind PRIs' fiscal dependency, such as limited revenue sources, inadequate financial management capacity, and insufficient administrative autonomy.
- **Potential Solutions:** Outline various measures that PRIs can adopt to achieve greater fiscal autonomy while ensuring accountability:
 - **Enhancing Revenue Generation:** Encourage PRIs to explore alternative revenue sources such as property taxes, user fees for services, and local resource mobilization. Provide technical assistance and capacity building to strengthen PRI revenue collection mechanisms.
 - **Financial Devolution:** Advocate for higher allocations of financial resources from the state government to PRIs, in accordance with constitutional provisions. Implement transparent and predictable fiscal transfer mechanisms to ensure timely disbursement of funds.
 - **Improving Financial Management:** Promote the adoption of modern accounting and financial management practices within PRIs to enhance transparency and efficiency. Establish mechanisms for regular financial audits and oversight to ensure proper utilization of funds.
- **Empowering Local Institutions:** Grant greater decision-making powers to PRIs regarding budget allocation and expenditure prioritization. Encourage active participation of local communities in the budgeting process to enhance accountability.
- **Balancing Autonomy with Accountability:** Emphasize the importance of striking a balance between fiscal autonomy and accountability: While advocating for greater fiscal autonomy, emphasize the need for robust accountability mechanisms to prevent misuse of funds. Stress the significance of transparency, citizen engagement, and social audits in ensuring PRI accountability.
- **Conclusion:** Summarize the key points discussed and reiterate the importance of empowering PRIs with greater fiscal autonomy while ensuring accountability to promote effective governance at the grassroots level.

Remember to support your arguments with relevant examples, case studies, and constitutional provisions to strengthen your response. Additionally, maintain clarity, coherence, and logical flow throughout your answer.

Q2. Which of the following are the core principles of the right to free legal aid?

1. Equal access to justice for all.
2. Availability of legal services without discrimination.
3. Legal representation for all, regardless of financial means.
4. Provision of legal aid only to specific categories of individuals.
5. Ensuring fair trial and due process for all.

Select the correct code:

- A) Only two
- B) Only three

- C) Only four
- D) All five

Q3. A state government has imposed a travel ban on a neighbouring state due to an outbreak of a highly contagious disease. However, the neighbouring state challenges this ban in court, arguing that it violates their citizens' right to freedom of movement guaranteed under the Constitution. Which of the following statement is MOST likely true in this scenario?

- A) The travel ban is likely to be upheld by the court if the state government can

demonstrate a compelling public interest in preventing the spread of the disease.

- B) The neighbouring state's argument about the right to freedom of movement is irrelevant in this context.
- C) The court is likely to strike down the travel ban if it deems it to be excessive and disproportionate to the public health threat.
- D) The EDA 1897 explicitly grants state governments the authority to impose travel bans during disease outbreaks.

Q4. In Haldwani (Uttarakhand) a recent violence-triggering demolition drive targeted structures allegedly on Nazool land. Consider the following statements in the context of the Nazool land:

- 1. Nazool land refers to property primarily owned by the government, often acquired from kings and royals during British rule and marked as state-owned post-independence.
- 2. It is generally not directly administered as state property. Instead, the government leases nazool land to individuals, organizations, or institutions for a fixed period, typically ranging from 15 to 99 years.
- 3. The management of nazool land falls under the purview of the revenue department of the respective state government.

How many of the above statements are correct?

- A) Only one
- B) Only two
- C) All three
- D) None

Q5. Consider the following statements in the context of the Automated Permanent Academic Account Registry (APAAR):

- 1. It is an innovative initiative by the Union Minister of Education and Skill Development & Entrepreneurship.
- 2. It assigns a 16-digit unique identification number to every student in India, linking it with their Aadhaar number for accurate identification and reducing the chances of duplication.
- 3. It creates a decentralized database tracking a student's academic progress, offering a district-wise record system from early education to higher studies.
- 4. It eliminates the need for physical copies of academic records, reducing paperwork for both students and institutions.



How many of the above statements are correct?

- A) Only one
- B) Only two
- C) Only three
- D) All four

Q6. In which landmark case did the Supreme Court of India affirm the right to free legal aid as a fundamental right under Article 21?

- A) Hussainara Khatoon v/s State of Bihar
- B) Maneka Gandhi v/s Union of India
- C) Kesavananda Bharati v/s State of Kerala
- D) Golaknath v/s State of Punjab

ANSWER: 2) C, 3) A, 4) C, 5) B, 6) A

Topic	Why in News	QR Code
Coal Mines Provident Fund Organization	The Union Minister inaugurated the C-CARES web portal of CMPFO, developed and designed by C-DAC, an R&D organization under the Ministry of Electronics and Information Technology.	
State Anthem of Meghalaya	The newly launched Meghalaya state anthem has sparked controversy due to the exclusion of the Jaintia or Pnar language.	

2. INTERNATIONAL RELATIONS

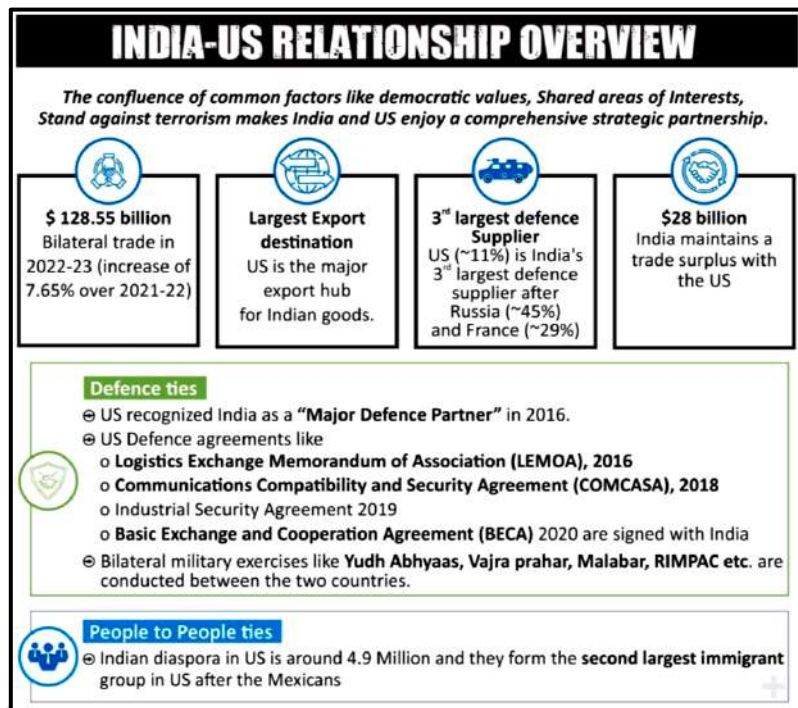
2.1 INDIA- U.S. NUCLEAR COOPERATION

Context

- The U.S. Assistant Secretary of State for Energy Resources recently stated, that India-U.S. nuclear cooperation envisaged under the nuclear deal is “an important piece of unfinished business”.

Details

- Terming the India-U.S. nuclear cooperation envisaged under the nuclear deal two decades ago as “an important piece of unfinished business”, U.S. Assistant Secretary of State for Energy Resources Geoffrey R. Pyatt said on Monday there is a “shared interest” to figure out how the two countries can move forward, both on the large traditional reactors which were foreseen as part of the nuclear deal but also importantly the “fantastic new opportunities” that are emerging around Small and Modular Reactor (SMR) technology.



Key Highlights

Clean Power and Weather Alternates: Reducing Chinese Domination

- In discussions concerning clean power and climate change mitigation, there is a notable emphasis on reducing China's dominance in clean energy supply chains. This is seen as a strategic imperative to ensure greater autonomy and resilience in the global energy landscape.

Utilizing India's Capacities: Manufacturing and Labor Costs

- Additionally, there is a strong push to leverage India's manufacturing capabilities and competitive labor costs to establish alternative supply chains, thereby diversifying sources and reducing dependency on a single nation.

India-U.S. Nuclear Cooperation: Historical Milestones

- Regarding India-U.S. nuclear cooperation, significant milestones have marked the trajectory of this partnership, demonstrating the evolving dynamics and shared interests between the two nations.

History and Milestones

India's Nuclear Testing: 1974

- Beginning with India's first nuclear test in 1974, which led to sanctions and limited cooperation from the U.S., the relationship has evolved substantially.

Landmark Agreement: 2005

- A pivotal moment came in 2005 with the signing of the U.S.-India Civil Nuclear Agreement, often referred to as the 123 Agreement, which paved the way for civil nuclear trade and collaboration.

Congressional Approval: 2008

- Subsequent years saw further progress, including the approval of the agreement by the U.S. Congress in 2008 and the commencement of construction on the first U.S.-built nuclear power plant in India in 2010.

The U.S.-India Civil Nuclear Agreement: Key Provisions

Introduction and Context

- The U.S.-India Civil Nuclear Agreement, signed in 2005, represents a significant shift in the nuclear relationship between the two nations, setting the stage for enhanced cooperation while addressing non-proliferation concerns.

Separation of Facilities

- Central to the agreement was India's commitment to separating its civilian and military nuclear facilities, with civilian facilities subject to International Atomic Energy Agency (IAEA) safeguards.

Nuclear Trade and Commitments

- Additionally, the agreement facilitated nuclear trade between the two countries, allowing the U.S. to supply nuclear fuel and technology for India's civilian nuclear program. Importantly, India reaffirmed its commitment to non-proliferation efforts and agreed to additional safeguards to prevent the unauthorized transfer of sensitive nuclear technology or materials.

Expected Benefits for India: Advantages and Opportunities

Energy Security and Economic Growth

- The U.S.-India Civil Nuclear Agreement holds several anticipated benefits for India, including enhanced energy security, economic growth, and strategic partnerships with the U.S.

Access to Advanced Technology and Environmental Protection

- Furthermore, access to advanced nuclear technology and fuel promises to modernize India's energy infrastructure, improve safety standards, and contribute to environmental protection efforts by reducing reliance on coal-fired power plants.

Current Status and Challenges

Progress and Setbacks

- Despite significant strides, the full realization of the U.S.-India Civil Nuclear Agreement has encountered challenges, including domestic hurdles in India, geopolitical concerns, and U.S. domestic politics.

Measures and Suggestions: Overcoming Challenges

Renewed Efforts and Private Sector Participation

- To overcome these challenges and revitalize cooperation in the civil nuclear energy sector, India and the U.S. must make concerted efforts, including revising domestic laws to facilitate greater participation of private corporations in the civil nuclear domain.

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Expanding Scope and Mutual Trust

- Additionally, there is a recognition of the need to broaden the scope of cooperation beyond traditional nuclear reactors envisioned in the original agreement to include emerging technologies such as Small and Modular Reactors (SMRs), coupled with sustained diplomatic engagement and mutual trust-building.

Way Ahead: Commitment and Collaboration

Remaining Committed to the Agreement

- Despite the challenges encountered, both nations remain committed to the agreement and continue to work towards expanding cooperation in the civil nuclear energy sector.

Unlocking Full Potential

- Success will depend on addressing outstanding challenges, including regulatory barriers and geopolitical concerns, and

fostering greater trust and collaboration between the two countries, unlocking the full potential of the U.S.-India Civil Nuclear Agreement.

Conclusion

- Renewed diplomatic engagement, coupled with measures to facilitate private sector participation and embrace emerging technologies, will be crucial for unlocking the agreement's benefits and fostering mutual trust and collaboration.
- By navigating these challenges and building on shared interests, India and the U.S. can strengthen their partnership in the civil nuclear energy sector, contributing to global non-proliferation efforts, environmental sustainability, and economic prosperity for both nations.

2.2 INDIA-UAE BILATERAL INVESTMENT TREATY

Context

- The economic ties between India and the UAE are set to be strengthened with the signing of a Bilateral Investment Treaty, unlocking investment potential.



Details

- The Union Cabinet on February 1 approved an investment treaty with the United Arab Emirates (U.A.E.) that is likely to significantly boost bilateral economic engagement in a range of areas, including manufacturing and foreign direct investment (FDI).
- The Union Government also approved the signing and ratification of a Bilateral Investment Treaty (BIT) between India and the United Arab Emirates (U.A.E.).

About Bilateral Investment Treaty (BIT)

- A Bilateral Investment Treaty (BIT) is an agreement between two countries that aims to promote and protect investments made by nationals of one country in the territory of the other.
- It provides a legal framework for investors, ensuring fair and equitable treatment, and protection from discrimination and expropriation.

Key Provisions of the India-UAE Bilateral Investment Treaty (BIT)

National Treatment and Most-Favored-Nation (MFN) Treatment:

- Under this provision, both India and the UAE commit to treating investments from each other's countries no less favorably than they **treat investments from their nationals or from any other country**, whichever treatment is more favorable. This ensures that investors from both countries receive **equal treatment and protection** under the law, promoting confidence and certainty in cross-border investments.

Fair and Equitable Treatment:

- Investors from India and the UAE are guaranteed fair and equitable treatment, which includes **protection from arbitrary or discriminatory measures by the host government.**
- This provision aims to safeguard investors' interests and ensure **that they are not subject to unfair treatment**, enhancing the attractiveness of both countries as investment destinations.

Transparency:

- The transparency provision requires both India and the UAE to make their laws, regulations, and investment-related procedures publicly available promptly. By promoting transparency, investors are better informed about the legal framework governing their investments, reducing uncertainty and the risk of misunderstanding or misinterpretation of laws and regulations.

Dispute Settlement:

- In the event of an investment dispute between an investor and the host country, the BIT provides mechanisms for resolving such disputes, including arbitration. This ensures that investors have access to an impartial and efficient dispute resolution mechanism, which is crucial for mitigating investment risks and maintaining investor confidence.

Benefits of the India-UAE BIT

Increased Investment:

- The BIT is expected to facilitate **increased investment flows between India and the UAE** by providing a stable and predictable legal framework for investors.
- This is likely to attract investments across various sectors such as infrastructure, energy, and manufacturing, leading to economic growth and development in both countries.

Reduced Investment Risk:

- By offering greater legal certainty and protection to investors, the BIT helps to **reduce investment risk. Investors are more confident in making long-term investments** knowing that their rights are protected under

the treaty, thereby encouraging capital inflows and promoting economic stability.

Job Creation:

- Increased investment resulting from the BIT can **lead to the creation of new job opportunities in both India and the UAE.** Investments in sectors such as infrastructure and manufacturing often require skilled and unskilled labor, contributing to employment generation and socio-economic development.

Economic Growth:

- The BIT has the potential to **contribute to overall economic growth in India and the UAE by attracting foreign direct investment (FDI) and promoting productive investments.** This, in turn, can stimulate business activity, increase productivity, and foster innovation, driving sustained economic expansion in both countries.

Encouraging Domestic Manufacturing:

- With the influx of foreign investment encouraged by the BIT, there is a possibility of establishing new manufacturing units and industries in India.
- This not only creates employment opportunities but also enhances the country's manufacturing capabilities and contributes to its industrial development agenda.

Promoting Technology Transfer:

- The BIT can facilitate the transfer of advanced technology and know-how from the UAE to India through foreign investments. This technology transfer can be instrumental in **upgrading India's industrial infrastructure, improving productivity, and fostering innovation in key sectors, thereby enhancing the country's competitiveness** in the global market.

Boosting Exports:

- Increased investments in India can lead to the expansion and **diversification of production capacities, resulting in higher exports of Indian goods and services to international markets.** This can contribute to enhancing India's trade balance, promoting economic growth, and strengthening its position as a key player in the global economy.

Conclusion

- The India-UAE BIT is a significant agreement that is expected to have a positive impact on bilateral economic relations. By providing greater certainty and protection to investors, the BIT is expected to increase investment flows, create jobs, and promote economic

growth in both countries. The BIT is also expected to support the Atmanirbhar Bharat initiative by promoting self-reliance and reducing India's dependence on imports.



2.3 RISING TENSIONS IN THE KOREAN PENINSULA

Context

- The current aggravation of ties between North and South Korea results from North Korea's abandonment of the goal of Korean reunification and its formal categorization of South Korea as an adversarial state.



Details

- There has been a notable uptick in provocative moves by North Korea and the subsequent rebuttals by South Korea and its allies. North Korea has rescinded its national objective of Korean reunification and has formally categorized South Korea as an adversarial state.
- The country has also ramped up the frequency and diversity of its missile tests, expanding its strategic capabilities. These actions were responded to by South Korea through joint military drills with the U.S. and Japan.
- The ongoing developments in the Korean peninsula have raised serious concerns about the deterioration of the international security environment and a deepening of major power rivalry.

Background

Division and Ideology

- The division of the Korean peninsula along the **38th parallel after World War II** entrenched two contrasting ideologies. The North, backed by the Soviet Union, embraced authoritarian communism under the leadership of **Kim Il-sung and his successors**. In contrast, the South, supported by the **United States**, pursued democracy and capitalism, establishing itself as a vibrant democratic nation.

Korean War (1950-53)

- The Korean War erupted when North Korea launched a surprise invasion of the South in an attempt to unify the peninsula under communist rule. This conflict, often regarded as the **first "hot war" of the Cold War**, led to significant loss of life and destruction. The war concluded with an armistice agreement, leaving the **peninsula divided by a heavily fortified demilitarized zone (DMZ)**.

Nuclear Ambitions

- Since the **1990s**, North Korea's pursuit of **nuclear weapons** has been a major source of global concern. Despite international efforts such as the **Agreed Framework and Six-Party Talks**, North Korea conducted multiple nuclear tests and developed various delivery systems, including missiles and submarines.

Cybersecurity Threats

- North Korea has been implicated in numerous cyberattacks targeting South Korea and other nations. These attacks have aimed at critical infrastructure and the theft of **sensitive information, posing significant cybersecurity challenges**.

Historical Context

- **Korean Peninsula's Division after World War II**
- Following Japan's defeat and withdrawal from the Korean peninsula at the end of World War II, the Allies divided Korea along the **38th parallel**. The Soviet Union occupied the North, while the United States controlled the South. This division laid the groundwork for the ideological and political differences that persist to this day.

Korean War and Its Aftermath

- The **outbreak of the Korean War in 1950** further solidified the division, with the conflict resulting in significant casualties and the establishment of the DMZ. Despite the **armistice agreement in 1953**, the war technically never ended, leaving the peninsula in a state of tense ceasefire.

Contemporary Ideological and Political Divide

- Decades after the cessation of active conflict and the end of the Cold War, the ideological

and political divide between North and South Korea remains pronounced. **The North continues to adhere to an authoritarian dynastic regime** aligned with China and Russia, while the South has evolved into a liberal democracy allied with the United States.

North Korea's Nuclear Program

- Despite international pressure and diplomatic efforts, **North Korea has persistently pursued** its nuclear weapons program. This has led to heightened tensions in the region and raised concerns about nuclear proliferation and security.

Diplomatic Efforts and International Response

- Various diplomatic initiatives, including the **Agreed Framework and Six-Party Talks**, aimed to address North Korea's nuclear ambitions through dialogue and negotiation. However, these efforts have had limited success, as North Korea has continued to advance its nuclear capabilities.

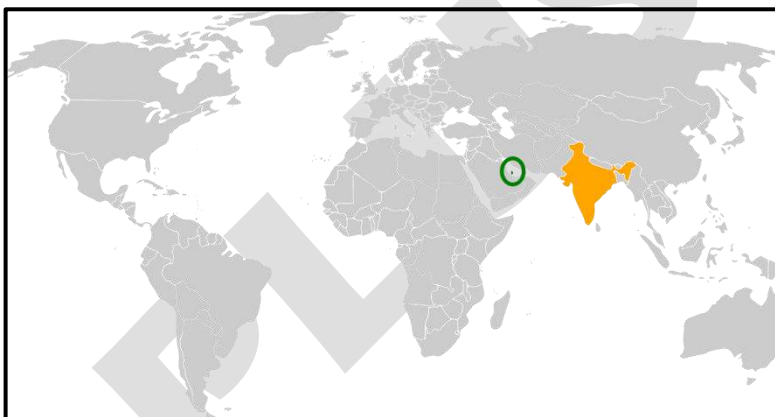
Recent Developments	Significance
Shift in North Korea's Policy	For Regional Stability: The Korean peninsula's stability is crucial for regional peace and cooperation.
Declared goal of reunification "dead"	For the World: The resolution of the nuclear standoff and the promotion of peace on the peninsula have global implications for security and non-proliferation efforts.
Officially labeled South Korea an "enemy state"	For India: India has a vested interest in the stability and security of the Korean peninsula due to its proximity and its broader diplomatic and strategic engagements in East Asia.
Increased Missile Tests	The Korean peninsula serves as a test case for international diplomacy and multilateral cooperation.
Conducted a series of missile tests in early 2024	The outcome of the nuclear standoff impacts major powers such as the United States, China, Russia, Japan, and other countries.
Demonstrated hypersonic weapon capabilities	India supports efforts for denuclearization and peaceful dialogue between North and South Korea.
South Korea's New Government	India condemns North Korea's nuclear and missile tests and implements UN sanctions against it.
Election of a conservative government	India maintains humanitarian and developmental cooperation with North Korea, providing aid and scholarships.
Shift towards a more assertive stance	India enhances its strategic partnership with South Korea in various fields such as trade, defense, and culture.
Joint Military Drills	The stability and security of the Korean peninsula have implications for global peace and security.

Conducted by the US, South Korea, and Japan	A peaceful resolution of the nuclear issue could open up new opportunities for regional integration and development.
Aimed to demonstrate combined capabilities	A military conflict on the peninsula could escalate into a wider war involving major powers, causing massive casualties and devastation.
Viewed with suspicion by North Korea	Improved inter-Korean relations could foster trust and collaboration, contributing to regional balance and cooperation.

2.4 INDIA-QATAR RELATIONS

Context

- The recent release of eight former Indian Navy officials by Qatar, who were detained on security charges, marks a positive development in bilateral relations between the two nations.



The Release and its Repercussions

- The detention of the former Navy personnel and their subsequent death sentences caused significant tension between India and Qatar. The Emir of Qatar's decision to grant clemency and facilitate their return home signifies a willingness to resolve the issue amicably.
- Diplomatic efforts:** Intense engagement at various levels, including interventions by the Indian Prime Minister and External Affairs Minister, may have played a crucial role.
- Strategic considerations:** Recognizing the value of strong ties with India, a rising economic and strategic power, possibly influenced Qatar's decision.
- Humanitarian concerns:** The harsh sentences and plight of the detained personnel likely factored into the Emir's compassionate action.

The Broader Context

India and Qatar share strong economic and strategic ties, reflected in:

- Energy cooperation:** Qatar is a major supplier of Liquefied Natural Gas (LNG) to India, crucial for India's energy security.
- Investments:** Both countries encourage bilateral investments in diverse sectors like infrastructure, healthcare, and technology.
- Defense cooperation:** Regular military exercises and exchanges underscore growing defense ties between the two nations.

The Navy personnel incident, however, highlighted the potential vulnerabilities in this relationship. Moving forward, both nations should

- Strengthen communication channels:** Regular diplomatic dialogues and consultations can prevent misunderstandings and foster mutual trust.
- Emphasize legal frameworks:** Clear agreements on legal procedures and consular access can protect citizens' rights in both countries.

- **Expand cooperation:** Fostering collaboration in diverse areas like trade, investment, and security can solidify the strategic partnership.

Conclusion

- The release of the Navy veterans marks a positive step in India-Qatar relations. While this episode highlighted potential challenges, it also underscores the importance of open communication and continued engagement for a mutually beneficial partnership. Moving forward, by building stronger legal frameworks, enhancing communication, and expanding cooperation, both nations can ensure a resilient and prosperous relationship.



2.5 NEIGHBOURHOOD FIRST POLICY

Context

- India's UPI Services Expand To Sri Lanka, Mauritius; PM Modi Highlights 'Neighbourhood First Policy'.

Details

- India's Unified Payment Interface (UPI) services were rolled out in Sri Lanka and Mauritius on Monday. Prime Minister Narendra Modi described it as linking historic ties with modern digital technology.
- Prime Minister Modi, his Mauritian counterpart Pravind Jugnauth and Sri Lankan President Ranil Wickremesinghe virtually attended a launching ceremony of India's RuPay card services in Mauritius.



India's Neighbourhood First Policy

- India's "Neighbourhood First Policy" (NFP), adopted in 2014, aims to foster deeper ties and cooperation with its immediate neighbours, prioritizing their interests and concerns in its foreign policy approach.

Key Principles and Achievements

- **Regional Connectivity and Integration:** NFP aims to improve connections among countries in the region, including physical, digital, and people-to-people links. Initiatives like the Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement and the India-Myanmar-Thailand (IMT) Trilateral Highway Project are examples of these efforts.

- **Development and Cooperation:** India supports its neighbors with lines of credit, capacity-building programs, and technical assistance, fostering economic growth and mutual prosperity. For instance, India's provision of COVID-19 vaccines and medical supplies to neighboring countries demonstrates its commitment to regional health security.
- **Security Cooperation:** NFP prioritizes regional security through counter-terrorism cooperation, joint military exercises, and intelligence sharing. The trilateral India-Nepal-Bhutan security dialogue and involvement in the Quad framework with the US, Japan, and Australia reflect this commitment.

Challenges and Considerations

- **Internal Conflicts:** Some neighboring countries face unresolved territorial disputes and internal conflicts, posing challenges to regional stability. NFP addresses these issues by engaging with all parties and promoting peaceful resolutions.
- **Asymmetrical Power Dynamics:** India's larger size compared to its neighbors can lead to concerns about dominance. NFP seeks to address these concerns through a consultative approach and by focusing on mutually beneficial outcomes.
- **Competition from Other Players:** Other global and regional powers also engage with India's neighbors, offering alternative partnerships. NFP distinguishes itself by highlighting shared history, cultural ties, and economic interdependence.

Looking Forward

- **Sustainable Development:** NFP should prioritize projects that promote long-term

benefits and environmental sustainability, addressing concerns related to climate change and resource management.

- **People-to-People Connect:** Strengthening cultural exchanges, educational opportunities, and visa facilitation can enhance people-to-people ties beyond government-led initiatives.
- **Addressing Specific Needs:** Customizing NFP engagements to the unique needs and priorities of each neighbor can deepen partnerships.

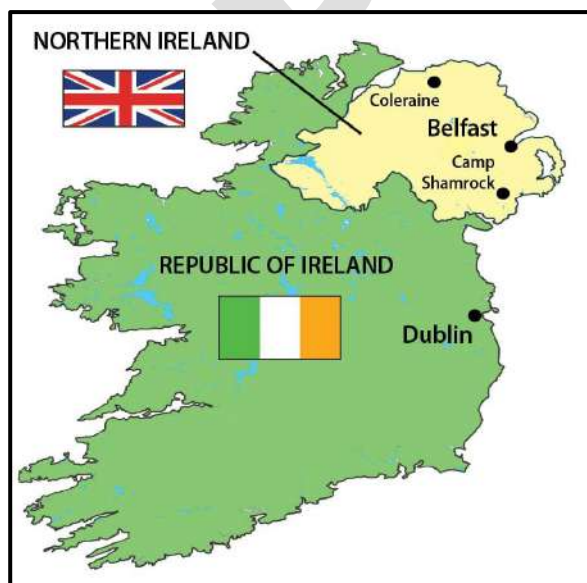
Conclusion

- India's Neighbourhood First Policy has the potential to promote regional stability and prosperity. By overcoming challenges, promoting inclusivity, and focusing on sustainable development, NFP can contribute to a peaceful and prosperous neighborhood, ultimately benefiting India's national interests.

2.6 NORTHERN IRELAND CONFLICT

Context

- The recent formation of a power-sharing government in Northern Ireland after a two-year stalemate marks a potentially significant development in the region's history.



Understanding the Conflict

Roots of Division

- The conflict in Northern Ireland, often referred to as "The Troubles," stems from historical and religious divisions between the predominantly Protestant unionists, who favor remaining part of the United Kingdom, and the mainly Catholic nationalists, who aim to join the Republic of Ireland.



Decades of Violence

- From the late 1960s to the late 1990s, the conflict resulted in over 3,500 deaths and widespread social and economic disruption.

Good Friday Agreement

- The 1998 Good Friday Agreement, a key peace accord, established a power-sharing government requiring cooperation between unionists and nationalists.

The Stalemate and its Causes

Brexit

- The 2016 Brexit vote and the resulting Northern Ireland Protocol, which created a trade border between Northern Ireland and Great Britain, reignited tensions. Unionists felt isolated from the UK, while nationalists saw an opportunity for closer ties with Ireland.

DUP Opposition

- The Democratic Unionist Party (DUP), the main unionist party, refused to participate in the power-sharing government, citing concerns about the Protocol.

The Breakthrough and its Implications

New Leadership

- The election of Michelle O'Neill, a leader from Sinn Féin (the main nationalist party), as First Minister represents a historic first.

Revised Protocol

- The EU and UK agreed to some changes in the Protocol, addressing some unionist concerns while maintaining the border with Ireland open.

Potential for Progress

- With a functioning government, Northern Ireland can now address pressing issues like healthcare, infrastructure, and economic development.

Challenges and Uncertainties

Deep-Seated Divisions

- The root causes of the conflict remain, and trust between communities takes time to rebuild.

Legacy of Violence

- Addressing the historical grievances and injustices of the past remains crucial for lasting peace.

External Influences

- Ongoing political developments in the UK and Republic of Ireland could impact the stability of the new government.

Conclusion

- The formation of a new power-sharing government in Northern Ireland offers a glimpse of hope for a more peaceful and prosperous future. However, significant challenges remain. By fostering reconciliation, addressing historical grievances, and finding common ground, all parties can contribute to a brighter future for the region.

2.7 DIGITAL SERVICES ACT OF THE EUROPEAN UNION

Context

- The European Commission has opened formal proceedings against ByteDance's TikTok under the Digital Services Act (DSA), according to a document seen by Reuters, to see if the social media platform is doing enough to protect children.



The Digital Services Act (DSA) is a significant regulation in the field of protecting the digital space and users' fundamental rights. It aims to regulate social media, online marketplaces, very large online platforms (VLOPs), and very large online search engines (VLOSEs) with a focus on transparency and accountability.

- The DSA came into effect for very large online platforms and search engines on August 25, 2023, and will be fully applicable to other entities by February 17, 2024.

Goals

Prevent illegal content online

- This includes tackling hate speech, disinformation, fake news, and the sale of illegal goods and services.

Protect fundamental rights

- Safeguard freedom of expression while protecting users from harmful content and ensuring transparency and accountability from platforms.

Create a fair and open online platform environment

- Level the playing field for businesses by addressing the dominance of large online platforms and fostering competition.

Key provisions

Enhanced content moderation

- Requires platforms to remove illegal content more quickly and efficiently, with clear procedures for users to report and appeal decisions.

Transparency and accountability

- Platforms must be transparent about their algorithms and content moderation practices, and report regularly on the type and volume of illegal content they encounter.

Traceability of traders

- Makes online marketplaces liable for illegal goods and services sold on their platforms, requiring them to take measures to identify and remove sellers engaged in such activities.

Risk-based approach

- Applies stricter obligations to very large online platforms (VLOPs) with over 45 million monthly users, considering their greater potential impact.

Crisis response mechanism

- Enables the EU to address systemic risks and threats arising from online platforms during emergencies.

Impact and Significance

- The DSA sets a new global standard for regulating online platforms, with potential ripple effects beyond the EU.
- It could incentivize platforms to be more proactive in content moderation and user protection, creating a safer online environment.
- It could foster a more competitive and level playing field for businesses operating online.

- However, concerns have been raised about potential impacts on freedom of expression and the ability of smaller platforms to comply with the regulations.

India and the Digital Services Act

- *The recent adoption of the Digital Services Act (DSA) by the European Union has sparked discussions about its potential impact on digital regulations worldwide, including in India. While the DSA is specifically designed for the EU market, its focus on online safety, transparency, and accountability aligns with the proposed Digital India Act, 2023, which aims to address the challenges and opportunities presented by the digital revolution in India.*

Opportunities

Validation of India's approach

- The DSA's focus on regulating large tech platforms and online intermediaries validates India's similar approach in the proposed Digital India Act. This can strengthen India's position in advocating for global standards in digital regulation.

Benchmark for India's Digital India Act

- The DSA can serve as a valuable benchmark for India to learn from and adapt its own digital regulations. Provisions like content moderation, user rights, and transparency requirements offer valuable insights for shaping the Digital India Act.

Promoting global cooperation

- The DSA's emphasis on collaboration among countries in tackling online harms can encourage India to engage in international dialogues and collaborations on digital governance.

Conclusion

- The DSA presents both opportunities and challenges for India's digital governance. By carefully analyzing its provisions and adapting them to its own context, India can leverage the DSA to create a safer and more transparent digital environment for its citizens. Additionally, India can actively participate in global discussions on digital

regulation, shaping the future of the digital world while addressing its unique needs and

challenges.

2.8 CMS COP14

Context

- The Convention on Migratory Species (CMS) 14th Conference of Parties (COP14) is taking place in Samarkand, Uzbekistan from February 12-17, 2024.



Details

- The Convention on Migratory Species (CMS) is an international treaty that aims to conserve and protect migratory animals and their habitats across the world. It covers more than 500 species of mammals, birds, reptiles, fish and invertebrates that cross national boundaries during their life cycles.

Key facts

- Dates and Location:** February 12-17, 2024, in Samarkand, Uzbekistan.
- Hosted by:** Government of Uzbekistan.
- Theme:** "Nature knows no borders."
- Focus:** Reviewing and strengthening the implementation of the Convention on Migratory Species (CMS) to protect migratory animals and their habitats across their ranges.

Key Issues and Discussions

Adoption of a new Strategic Plan for 2024-2032

- Setting ambitious goals and priorities for migratory species conservation over the next decade.

Reviewing the status of key migratory species

- Discussing threats facing specific animals like snow leopards, sharks, turtles, and songbirds.

Addressing emerging challenges

- Climate change, habitat loss, illegal wildlife trade, and invasive species.

Strengthening international cooperation

- Encouraging collaborative efforts among countries and organizations.

Participating Parties and Organizations

- Over 130 countries that are signatories to the CMS.
- International organizations like UNEP, IUCN, Birdlife International, WWF.
- Non-governmental organizations, research institutions, and indigenous communities.

Expected Outcomes

- A new Strategic Plan with concrete actions and targets for migratory species conservation.
- Enhanced cooperation and coordination among countries and stakeholders.
- Increased financial resources for conservation efforts.
- Public awareness and engagement in protecting migratory species.

Importance of CMS and COP14

- Migratory species play crucial roles in ecosystems and provide economic and cultural benefits.
- CMS is the only global legal framework for protecting migratory species across their entire range.
- COP14 is a critical opportunity to address urgent challenges and ensure the survival of migratory species.

Significance of Holding COP14 in Uzbekistan

- Highlights the importance of Central Asia for migratory species conservation.
- Provides a platform for developing countries to share their experiences and challenges.

- Promotes international cooperation and strengthens ties between regions.

Conclusion

- The CMS is a unique and vital instrument for global wildlife conservation. It recognizes the ecological and economic value of migratory

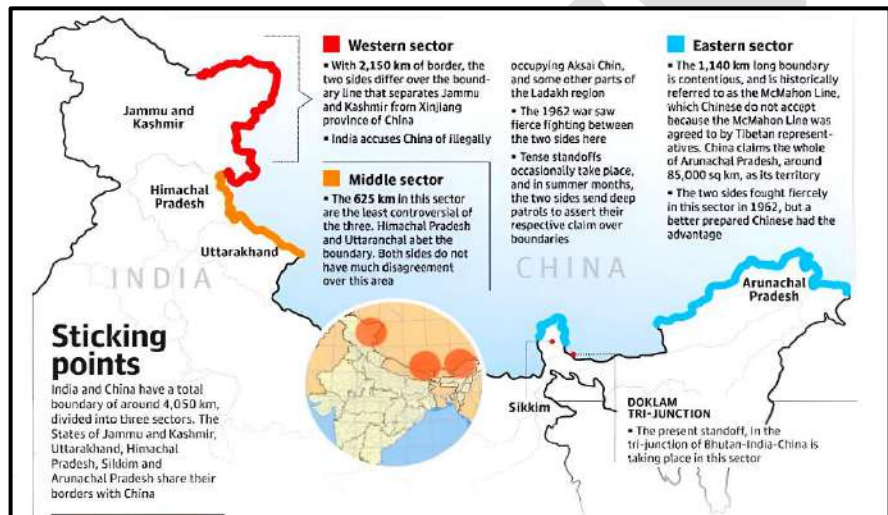
species and their role in maintaining ecosystem services and functions. It also acknowledges the cultural and social significance of migratory species for many peoples and communities around the world.



2.9 CHINA'S MODEL VILLAGES ALONG LAC

Context

- China has recently occupied newly constructed "Xiaokang" border villages along India's northeastern border, raising concerns due to their dual-use infrastructure near the Line of Actual Control in Arunachal Pradesh and Lohit Valley.



Xiaokang Border Defence Villages

- The Xiaokang Border Defence Villages are part of China's broader strategy to assert its presence and influence along its borders, particularly with neighbouring countries like India.
- These villages have been constructed along the Line of Actual Control (LAC), which separates India and China. The term "Xiaokang" translates to "well-off" or "moderately prosperous" in English.

What are Model Villages?

- China has been building "Xiaokang" (moderately prosperous) villages along the LAC, particularly in Ladakh and Arunachal Pradesh, since 2019.
- These villages are equipped with modern amenities like housing, schools, hospitals, and infrastructure, aiming to improve the living standards of border residents.

Xiaokang Border Defence Villages

What are Xiaokang Border Defence Villages?

- China has been constructing model villages known as "Xiaokang," meaning "well-off," along its borders with India, including the disputed Line of Actual Control (LAC). These villages started appearing around 2016 and have drawn scrutiny due to their potential military implications.

Concerns and Implications:

- **Military Buildup:** The scale and proximity of these villages to the LAC raise concerns about a potential Chinese military buildup close to Indian territory.
- **Dual-Use Infrastructure:** The modern infrastructure and potential for rapid mobilization of villagers into militia forces heighten worries about their military application.
- **Assertion of Claims:** China's investment in these villages could be seen as an attempt to solidify its territorial claims along the disputed LAC.
- **Information Gathering:** Residents could act as informants or observers, aiding Chinese military intelligence gathering.

India's Response:

- **Vibrant Villages Programme:** Launched in 2022 to develop Indian border villages with better infrastructure and amenities.
- **Strengthening Border Infrastructure:** India is focusing on building roads, bridges, and communication networks near the LAC.
- **Diplomatic Engagement:** India raises concerns about the Xiaokang villages through diplomatic channels.

- Some villages have been recently populated, raising concerns about their potential military and strategic purposes.

Potential Implications

Strategic Presence

- China's increased presence near the LAC through these villages could be seen as a way to solidify its territorial claims and exert influence in the region.

Military Infrastructure

- Some experts believe these villages could be used to support military deployment or logistics in case of a conflict.

Demographic Shift

- Populating these villages with Chinese citizens could potentially alter the demographics of the border regions in the long term.

Economic Development

- The villages could also serve as a tool for economic development in the border areas, potentially benefiting local communities.

Concerns and Criticisms

Transparency and Intentions

- The lack of transparency surrounding the construction and purpose of these villages raises concerns about China's intentions.

Militarization of the Border

- Critics argue that these villages contribute to the militarization of the LAC, potentially increasing tensions with India.

Disruption of Local Communities

- The influx of Chinese citizens and infrastructure development could disrupt the lives and livelihoods of existing border communities.

Conclusion

- The Xiaokang border defence villages represent a significant development along the India-China border with potential implications for both countries' security and economic interests. While the exact purpose remains unclear, the dual-use nature and strategic location of these villages raise concerns for India and necessitate a measured response focusing on infrastructure development, alternative routes, and improved border preparedness.



2.10 INDIA-OMAN COOPERATION IN THE ARCHIVAL FIELD

Context

- India and Oman have mutually agreed to cooperate in the field of Archives.

According to the Ministry of Culture, both countries have agreed on the need for formalizing institution-to-institution cooperation. In this regard, the draft of an Executive Programme of Cooperation (EPC) has been finalized, which will now be submitted for approval by the competent authorities of both parties and formally signed shortly.

- A delegation of the National Archives of India (NAI), visited the National Records and Archives Authority (NRAA) of Oman on February 21-22, aimed at exploring the areas of bilateral cooperation in the archival field.

- India and Oman have agreed to cooperate in the field of archives, as per a statement from the Cultural Ministry of India. A draft on cooperation was discussed and agreed upon during a visit by an Indian delegation led by the Director of the National Archives of India. The purpose of the visit was to explore areas of bilateral cooperation in the archival field.



Areas of Cooperation

Exchanging Information

- Sharing digital copies of documents of mutual historical interest to enrich both collections.

Technical Expertise

- India offering technical assistance to Oman in areas like conservation, digitization, and preservation of archival materials.

Best Practices

- Sharing best practices and expertise in archival management.

Capacity Building

- Potentially offering training programs for Omani archivists in India.

Recent Developments

February 2024 Visit

- A delegation from the National Archives of India (NAI) visited the National Records and Archives Authority (NRAA) of Oman to explore potential areas of collaboration.

Draft Agreement

- A draft of an Executive Programme of Cooperation (EPC) has been finalized and is awaiting approval by the competent authorities of both parties for formal signing.

Focus on Shared History

- The Indian delegation also interacted with representatives of the Indian diaspora in Oman, recognizing the value of private

archives held by families with connections to both countries.

Potential Benefits

Preservation of History

- Improved access to and preservation of historical documents related to India-Oman relations.

Enhanced Understanding

- Increased knowledge and appreciation of the shared historical and cultural links between the two nations.

Strengthened Ties

- Cooperation in the archival field can further strengthen India-Oman bilateral relations.

Uncertainties

- Specific Details:** The specific details of the collaboration, including the scope of information exchange and training programs, are still being finalized.

Conclusion

- Oman occupies a strategic position in India's foreign policy, contributing to energy security, economic growth, and diplomatic influence in the Middle East. The historical ties and multifaceted collaboration between the two nations underscore Oman's significance in shaping India's geopolitical and economic interests.



2.11 KALADAN MULTIMODAL TRANSIT TRANSPORT PROJECT

Context

- The ongoing political instability in Myanmar, including military rule, has significantly hampered the progress of the Kaladan Multimodal Transit Transport Project (KMTTP).

About Kaladan Multimodal Transit Transport Project (KMTTP)

- It is a major infrastructure initiative undertaken by India to enhance connectivity and trade between its northeastern states and the rest of the country.
- The project is designed to establish a multimodal transportation link between the eastern coast of India and Myanmar, connecting the Indian ports of Kolkata and Paradip with the Sittwe port in Myanmar.



Components

- The integration of Sittwe Port, Kaladan River, Paletwa Inland Water Terminal, and a new road network presents a comprehensive infrastructure plan to enhance connectivity for cargo transportation in the region.
- Sittwe Port:** Located in Rakhine State, Myanmar, Sittwe Port serves as a deep-sea port designed to handle cargo ships. Its strategic location allows for efficient maritime trade and connectivity to international waters.
- Kaladan River:** Develop the Kaladan River as a crucial waterway for transporting goods using barges. The river serves as a natural route connecting Sittwe Port to the inland areas, providing an alternative to land-based transportation.
- Paletwa Inland Water Terminal:** Establish an inland water terminal in Paletwa, Chin State, Myanmar. This terminal facilitates the efficient movement of cargo between the Kaladan River and the road network, acting as a key transfer point for goods.
- Road Network:** Construct a well-designed road network connecting Mizoram, India, to

Paletwa, Myanmar. This road infrastructure is essential for the seamless movement of goods between the inland water terminal, Mizoram, and other parts of northeastern India.

Benefits

- Reduced Transportation Costs:** Offers a shorter, cost-effective route compared to the Siliguri Corridor, potentially saving 30-40% on transportation costs, fostering increased competitiveness for businesses in northeast India, leading to lower prices for consumers, and boosting overall trade volume.
- Improved Connectivity:** Enhances trade and economic opportunities by providing a faster and more reliable route for transporting goods between northeast India and Southeast Asia, fostering increased trade diversification, improving access to essential goods and services, and creating new jobs in logistics and related sectors.
- Regional Development:** Promotes economic growth and development in the northeastern states of India and adjacent areas of Myanmar, creating jobs across various sectors, attracting investments in

infrastructure and other industries, and improving overall infrastructure and living standards in the region.

- **Strategic Significance for India:** Provides an alternative route to Southeast Asia, reducing dependence on the Siliguri corridor, potentially bolstering India's strategic position in the region, increasing access to Southeast Asian markets, and enhancing regional connectivity and cooperation.

Challenges

- **Rugged Terrain:** Mountainous terrain poses significant construction and maintenance challenges, leading to increased project costs and longer construction timelines.
- **Political Instability:** Ongoing civil war and political instability in Myanmar create uncertainty, resulting in delays in approvals, disruptions in construction, and increased risks of damage to infrastructure. Ensuring long-term sustainability becomes difficult amidst such instability.
- **Security Concerns:** The presence of armed groups in Myanmar poses security risks for construction workers and operations, leading to delays, increased project costs due to security measures, and potential disruption of operations.
- **Inter-ethnic Tensions:** Addressing concerns of various ethnic groups, especially in Chin State, is crucial for project success. Failure to address these concerns may lead to local opposition, social unrest, and disruptions to the project.
- **Environmental Considerations:** The implementation of the project must be environmentally conscious to minimize negative impacts on the local ecosystem. Potential issues include deforestation, habitat loss, impact on water resources, and air quality degradation, necessitating stringent environmental impact assessments and mitigation strategies.

Way Forwards

Addressing security concerns

- **Establish dialogue and cooperation with the Myanmar government,** ethnic armed groups, and local communities to ensure inclusivity and address concerns, fostering a collaborative approach for successful project implementation.
- **Implement robust security protocols** to protect construction workers, infrastructure, and project operations, ensuring a secure working environment and safeguarding the project against potential risks and disruptions.

Addressing inter-ethnic tensions

- **Ensure the project benefits all ethnic groups in Myanmar,** particularly those in Chin State, by incorporating inclusive policies and economic opportunities, promoting equitable development across diverse communities.
- **Address concerns and aspirations of various ethnic groups** through open dialogue and inclusive decision-making processes, acknowledging historical grievances, and fostering a sense of fairness and justice to build sustainable relationships.

Mitigating environmental impact

- **Conduct thorough environmental impact assessments to identify potential risks** and develop comprehensive mitigation strategies, ensuring proactive measures are in place to protect the environment.
- **Implement sustainable construction methods,** minimize deforestation and pollution, and ensure responsible waste management to mitigate environmental impacts and promote long-term environmental sustainability.

Enhancing project management and coordination

- **Strengthen the capacity of relevant institutions** in India and Myanmar to effectively manage and coordinate the project, fostering expertise and efficient execution.
- **Ensure clear communication and coordination** between all stakeholders involved in the project by establishing robust channels, enhancing transparency, and

facilitating seamless information flow for effective collaboration.

Exploring alternative financing options

- **Explore collaboration opportunities** with the private sector to leverage expertise and resources for project financing, fostering public-private partnerships for sustainable infrastructure development.
- **Seek support from international development agencies** and multilateral institutions to bridge funding gaps, enhancing financial backing and global cooperation for the successful implementation of the project.

Conclusion

- The Kaladan project is designed to reduce dependence on the congested Siliguri Corridor and enhance regional connectivity, promoting economic development in India's northeastern states. However, the project has faced challenges, including delays due to terrain, coordination issues, and security challenges in the region. Ongoing efforts involve addressing these challenges and ensuring the successful completion of the project to unlock its potential benefits for trade and development in the region.

2.12 SHORT ARTICLES

Quadrilateral Security Dialogue

Context

- At a discussion on the Quad's new version, former officials clarified it was the U.S. and Australia, and not India, that pulled out of the Quad in 2007.

Details:

- Leaders of the Australia-India-Japan-U.S. Quad may not be able to meet for a summit in India before the U.S. elections take place, American Ambassador Eric Garcetti said, stressing that the Quad agenda would be "more productive" by the end of 2024. Mr. Garcetti, who was speaking at a discussion with envoys from Australia and Japan, and former officials, at the Jaipur Literature Festival over the weekend, indicated that the election schedules and campaign requirements would make it difficult for U.S. President Joseph Biden to travel to Delhi. Mr. Biden had earlier declined an invitation to attend the Republic Day parade followed by the Quad summit, with the dates proposed by New Delhi for January 26-27.



About Quadrilateral Security Dialogue:

Introduction:

- The Quadrilateral Security Dialogue (Quad) is a strategic forum comprising four democratic Indo-Pacific nations: the United States, Japan, Australia, and India. Initially established in 2007, the Quad was revived in 2017 to address shared security challenges and promote a free, open, and inclusive Indo-Pacific region.
- **Background:** The Quad was first proposed in 2007 by Japanese Prime Minister Shinzo Abe as a coalition of maritime democracies to counterbalance China's growing influence in the region. However, the initiative was short-lived due to concerns about antagonizing China and the varying priorities of member countries.

Objectives:

- **Security Cooperation:** Enhance cooperation on regional security issues, including maritime security, counterterrorism, and cybersecurity.
- **Free and Open Indo-Pacific:** Promote a rules-based order, respect for international law, and freedom of navigation and overflight in the Indo-Pacific region.
- **Economic and Infrastructure Development:** Facilitate economic development and infrastructure projects to promote prosperity and connectivity in the region.
- **Humanitarian Assistance and Disaster Relief:** Coordinate efforts to provide humanitarian assistance and disaster relief in times of crisis.

Recent Developments:

- **Revival in 2017:** The Quad was revived in 2017 amid growing concerns about China's assertiveness in the Indo-Pacific, particularly in the South China Sea.
- **Ministerial Meetings:** Quad foreign ministers have held regular meetings since 2019 to discuss regional security issues and cooperation initiatives.
- **COVID-19 Response:** The Quad has collaborated on COVID-19 response efforts, including vaccine distribution and supply chain resilience.
- **Military Exercises:** Quad countries have participated in joint military exercises, such as the Malabar naval exercises, to enhance interoperability and maritime security capabilities.
- **Expansion of Membership:** There have been discussions about expanding the Quad to include other like-minded countries, although no formal decisions have been made.

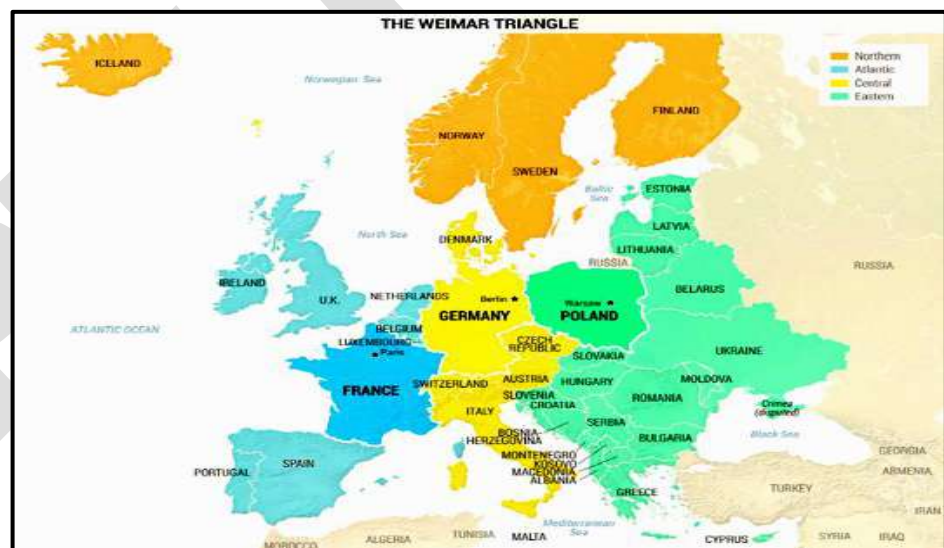
Weimar Triangle

Context

- The Weimar Triangle, a cooperation platform between Poland, France, and Germany, has announced a new initiative to strengthen cooperation and address common challenges.

Recent Developments and Future Directions:

- **Focus on Ukraine Crisis:** The ongoing war in Ukraine has become a central focus, with the Weimar Triangle expressing strong support for Ukraine and coordinating efforts for humanitarian aid and refugee support.
- **Reinforcing European Partnership:** In light of shifting geopolitical dynamics, the group reemphasizes its commitment to a strong and united Europe, promoting democracy and upholding common values.
- **New Areas of Cooperation:** Initiatives like the "Weimar of Excellence" in academic collaboration and the "Weimar of Culture" supporting Ukrainian artists showcase expanding partnerships beyond traditional domains.

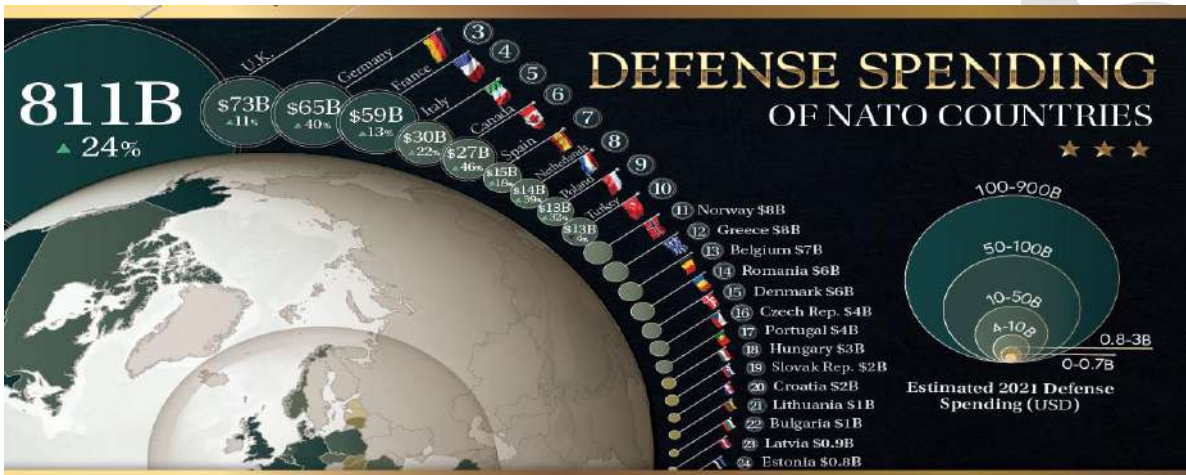


- **Addressing Internal Challenges:** Maintaining internal cohesion and ensuring that all members feel their interests are adequately represented remain vital for the Triangle's long-term success.

NATO Funding

Context

- NATO is resourced through the direct and indirect contributions of its members.
- NATO's common funds are composed of direct contributions to collective budgets and programmes, which equate to only 0.3% of total Allied defence spending (around EUR 3.3 billion for 2023). These funds enable NATO to deliver capabilities and run the entirety of the Organization and its military commands.



Recent Development:

- **Increased budgets:** In December 2023, NATO agreed to increase its civil and military budgets by 18.2% and 12% respectively, reflecting growing security challenges.
- **Calls for burden-sharing reforms:** Discussions continue on adjusting the cost-sharing formula to reflect changes in member states' economic capabilities.
- NATO, the North Atlantic Treaty Organization, is funded through a combination of **direct and indirect contributions** from its member states.



Direct Contributions:

- **Common budgets:** Member states contribute to three common budgets:
 - **Civil budget:** Funds the headquarters and international staff.
 - **Military budget:** Covers the operating costs of the command structure, missions, and operations.
 - **NATO Security Investment Programme (NSIP):** Finances major construction and infrastructure projects.
- **Cost-sharing formula:** Contributions are based on a formula that considers each member's **gross national income (GNI)** and other factors like population.

Current situation:

- As of 2023, the US and Germany are the biggest contributors, each providing around 16.2%.
- All members actively contribute, but the total amount remains a relatively small fraction of their national defense spending (around 0.3%).

Indirect Contributions:

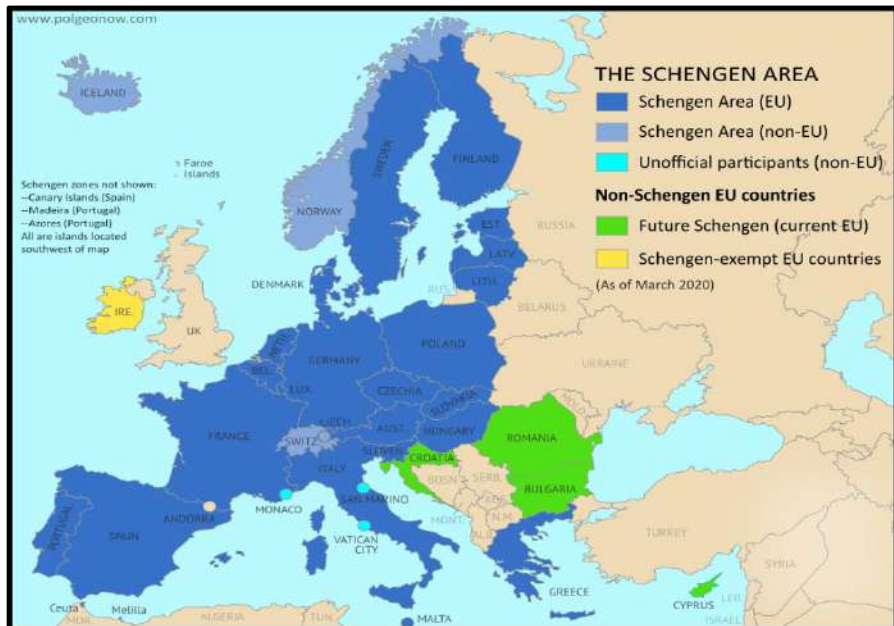
- **National defense spending:** Each member state maintains its own armed forces, equipment, and personnel.
- **Contributions to NATO operations and missions:** Members voluntarily deploy troops, equipment, and resources to specific operations.

- **Example:** While the US contributes the most to common budgets, it also has the largest military spending overall, indirectly contributing significantly to NATO's capabilities.

Schengen Zone

Context

- Kosovo, a non-EU Western Balkan nation, has faced delays in obtaining visa-free access to the Schengen Zone, despite meeting preconditions related to illegal migration and corruption in 2018, which are prerequisites for Schengen entry.



- **The Schengen Zone is an area encompassing 26 European countries that have agreed to abolish internal border controls.** This means that people can move freely between these countries without having to pass through passport checks. The Schengen Zone was created in 1985 with the signing of the Schengen Agreement, and it has since grown to include **most of the European Union (EU) countries, as well as Iceland, Liechtenstein, Norway, and Switzerland.**

Key benefits of the Schengen Zone:

- **Freedom of movement:** People can travel freely between Schengen countries without having to go through passport checks. This makes it easier for people to visit friends and family, work, study, and do business in other Schengen countries.
- **Economic benefits:** The Schengen Zone has boosted tourism and trade within the region. This has created jobs and economic growth in many Schengen countries.
- **Increased security:** The Schengen Zone has led to increased cooperation between law enforcement agencies in Schengen countries. This has helped to improve security and reduce crime.



Raisina Dialogue

Context

- The Prime Minister of India inaugurated the ninth edition of the Raisina Dialogue 2024, with Greece's Prime Minister Kyriakos Mitsotakis as the chief guest during the opening session.

Raisina Dialogue 2024:

- **Theme:** "Chaturanga: Conflict, Contest, Cooperate, Create"
- **Location:** New Delhi, India
- **Host:** Observer Research Foundation (ORF) in collaboration with the Ministry of External Affairs of India
- **Chief Guest:** Prime Minister of Greece, Kyriakos Mitsotakis

Focus Areas:

- The Dialogue addressed a wide range of global challenges under the four thematic pillars of "Chaturanga":



- **Conflict:** Discussions on ongoing conflicts, regional security issues, and global power dynamics.
- **Contest:** Exploring economic competition, technological advancements, and their impact on the international order.
- **Cooperate:** Encouraging international cooperation on issues like climate change, global health, and sustainable development.
- **Create:** Fostering innovation and entrepreneurship to address global challenges.

Key Participants:

- The Raisina Dialogue brings together world leaders, policymakers, diplomats, academics, and business leaders from across the globe.
- Representatives from over 100 countries participated in the 2024 edition.

Expected Outcomes:

- The Dialogue aims to promote dialogue and understanding on critical global issues.
- It facilitates cooperation and collaboration among participating countries and stakeholders.
- The discussions and recommendations generated during the event can influence policy decisions on an international level.

INDUS-X Summit

Context

- The 'INDUS-X' summit between India and the United States, organized by India's Innovations for Defence Excellence (iDEX) and the US Department of Defence in collaboration with the US-India Business Council and Society of Indian Defence Manufacturers (SIDM), is set to take place in Delhi.
- *Innovations for Defence Excellence (iDEX) is a flagship initiative launched by the Ministry of Defence (MoD) of India to promote indigenous development and innovation in the defense and aerospace sector. It aims to leverage the talent and resources of Indian startups, MSMEs, academia, and individual innovators.*

The Second Edition of INDUS-X:

- **Dates:** The most recent INDUS-X summit was held on February 20th and 21st, 2024, in New Delhi, India.
- **Organizers:** It was jointly organized by the Innovations for Defence Excellence (iDEX) under the Ministry of Defence, India, and the US Department of Defense (DoD).
- **Building on Collaboration:** Launched in June 2023, the INDUS-X initiative aims to strengthen India-US defense ties through collaboration on critical technologies.

The focus of the Summit:

- **Co-production:** Exploring opportunities for co-producing advanced military equipment and capabilities.
- **Resilient Supply Chains:** Discussions on building resilient defense supply chains to ensure smooth access to critical materials and technologies.
- **Military Interoperability:** Enhancing interoperability between US and Indian militaries for better cooperation in joint operations.
- **Innovation and Partnerships:** Highlighting themes like deepening defense industrial partnerships, joint research and development initiatives, and mobilizing private capital for critical defense technologies.



United Nations Conference on Trade and Development

Context

- UNCTAD recently raised an alarm over escalating disruptions in shipping routes for global trade in a new report.
- *The United Nations Conference on Trade and Development (UNCTAD) is a permanent intergovernmental body established by the United Nations General Assembly in 1964.*

About the United Nations Conference on Trade and Development (UNCTAD):

- **Focus:** Promoting the interests of developing countries in world trade and helping them integrate into the global economy on an equitable basis.
- **UN Secretariat:** UNCTAD is part of the UN Secretariat, reporting to the UN General Assembly and the Economic and Social Council (ECOSOC). It has its membership, leadership, and budget.
- **Headquarters:** The headquarters are located in Geneva, Switzerland, with offices in New York and Addis Ababa.


Key Roles:

- **Advocate for Developing Countries:** UNCTAD acts as a voice for developing countries in international trade negotiations.
- **Promoting Inclusive Development:** It advocates for policies that promote inclusive and sustainable development in developing countries.
- **Promoting Trade and Investment:** UNCTAD promotes trade and investment as tools for development.
- **Supporting Least Developed Countries:** The organization provides special support to least-developed countries (LDCs) to help them overcome their specific challenges.

2.13 SNIPPETS

APTI PLUS

G-33



- The G-33 countries, a coalition of developing nations within the World Trade Organization (WTO), have issued a statement ahead of the 13th Ministerial Conference expressing their stance on agriculture trade negotiations.
- The G-33 includes countries like India, China, and Indonesia, totaling 47 nations. They advocate for flexibility in market opening for agriculture, focusing on special products that are crucial for their development.

2.14 1 MAINS & 5 MCQs

Q1. Analyzing the Impact and Efficacy of the Digital Services Act: A Comprehensive Examination of its Role in Regulating Online Platforms within the European Union.

Approach:

Introduction

- Define the Digital Services Act (DSA) and its significance in regulating online platforms in the European Union (EU).

Objectives:

- Outline the intended purpose of the DSA in addressing issues like misinformation, hate speech, and platform accountability.

Implementation:

- Discuss the mechanisms proposed by the DSA for monitoring and enforcing regulations on digital platforms.

Stakeholder Perspectives:

- Evaluate viewpoints from policymakers, tech companies, and civil society regarding the effectiveness and feasibility of the DSA.

Potential Impact:

- Assess the potential consequences of the DSA on digital innovation, freedom of speech, and user privacy.

Conclusion:

- Summarize key findings and offer insights into the role and efficacy of the DSA in regulating online platforms within the EU.

Q2. What is the main benefit of the Schengen Zone for citizens of member states?

- (a) Cheaper flights within the zone
- (b) Access to exclusive tourist destinations
- (c) Freedom of movement without passport checks at internal borders
- (d) Reduced visa fees for travel outside the zone

Q3. Which country does not share a land border with Oman?

- (a) Saudi Arabia
- (b) Yemen
- (c) Iran
- (d) Qatar

Q4. The theme of the 2024 Raisina Dialogue is:

- (a) "Building Bridges for a Sustainable Future"
- (b) "Navigating a Multipolar World Order"
- (c) "Chaturanga: Conflict, Contest, Cooperate, Create"

- (d) "Rethinking Global Governance in the Digital Age"

Q5. The Weimar Triangle refers to a trilateral forum for cooperation between which three European countries?

- (a) Germany, France, Italy
- (b) Germany, Poland, Czech Republic
- (c) Germany, France, Spain
- (d) Germany, Sweden, Norway

Q6. The CMS COP14, recently held in the news, refers to the Conference of the Parties for which international agreement?

- (a) Convention on Biological Diversity (CBD)
- (b) United Nations Framework Convention on Climate Change (UNFCCC)
- (c) Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- (d) Ramsar Convention on Wetlands

ANSWERS: 2) c, 3) d, 4) c, 5) a, 6) c

3. ECONOMY

3.1 HIGHLIGHTS OF THE INTERIM UNION BUDGET 2024-25

Context

- The Interim Budget 2024-25 was recently presented in Parliament.
- It aims to achieve 'Viksit Bharat' by 2047 through comprehensive development.

Understanding Interim Budget

- An Interim Budget is presented during a transitional or last year of a government before elections.
- Ensures continuity of government expenditure and services until a new government presents a full budget.

Major Highlights

- Capital Expenditure:** 11.1% increase, Rs 11,11,111 crore allocated, constituting 3.4% of GDP.
- Economic Growth:** Projected GDP growth of 7.3% for FY 2023-24.
- Revenue and Expenditure Estimates:** Total receipts at Rs 30.80 lakh crore, expenditure at Rs 47.66 lakh crore.

Taxation and Fiscal Deficit

- Maintains existing tax rates, with fiscal deficit estimated at 5.1% of GDP.
- Gross market borrowing projected at Rs 14.13 lakh crore.

Priorities

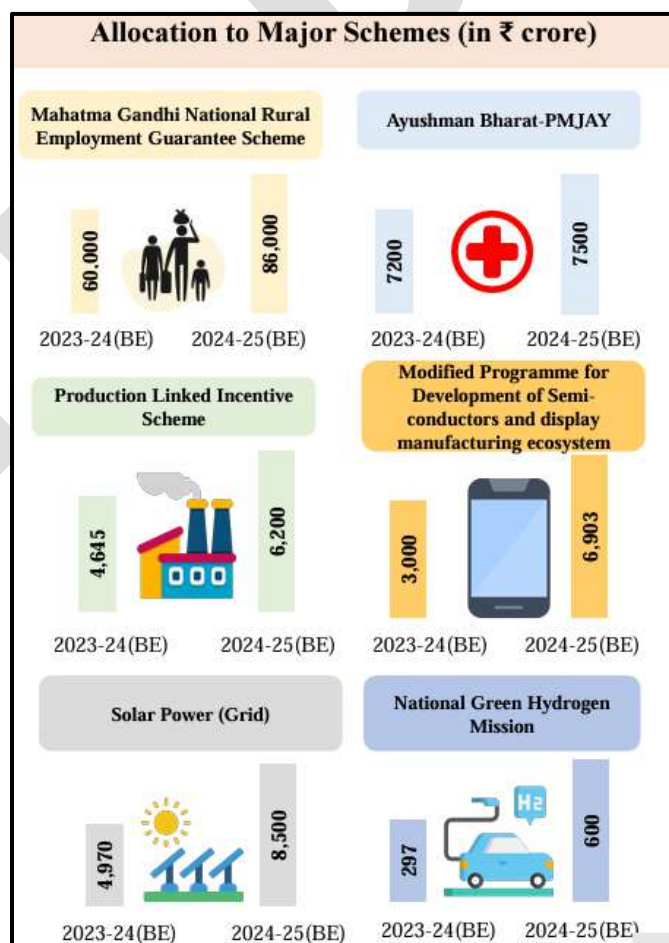
- Emphasis on poor, women, youth, and farmers.
- Notable achievements in poverty reduction, women's empowerment, skill training for youth, and farmer support.

Major Development Plans

- Infrastructure:** Focus on railways, aviation, urban transport.
- Clean Energy Sector:** Initiatives for wind energy, coal gasification, CNG, PNG, and solarization.
- Housing Sector:** Subsidies for rural housing and a scheme for middle-class housing.
- Healthcare Sector:** Vaccination programs, expansion of Ayushman Bharat.
- Agricultural Sector:** Encouraging Nano DAP, policies for dairy farmers, and self-reliance in oilseeds.
- Fishery Sector:** Establishment of 'Matsya Sampada' department.

State and Other Initiatives

- Continuation of interest-free loans for state capital expenditure.



- Formation of a high-powered committee to address population growth and demographic shifts.

Revenue Sources

- Majority of Budget funds sourced from borrowings and other liabilities.
- Income tax and GST & other taxes also contribute significantly.

Expenditure Breakdown

- Interest payments and state allocations dominate expenditure, each at 20% of total.
- State-wise distribution of central taxes and duties provided for transparency.

Allocation to Ministries

- Defence Ministry receives highest allocation of ₹6.21 lakh crore.
- Road Transport & Highways and Railways follow with ₹2.78 lakh crore and ₹2.55 lakh crore respectively.

Outlay for Major Schemes

- Allocations for key welfare schemes outlined for socio-economic development.

Railway Budget Highlights

- Railway projects under PM Gati Shakti Yojana aim for multi-modal connectivity.
- Three major economic corridors announced to boost GDP and reduce logistic costs.

Health Expenditure

- Dept. of health & family welfare receives increased allocation for FY25.
- Ministry of Health allocation remains below 2% of total expenditure, a continuing trend.

Other estimates and Government's achievements highlighted in Interim Budget

Social Justice

- Prime Minister to focus on upliftment of four major castes, that is, 'Garib' (Poor), 'Mahilayen' (Women), 'Yuva' (Youth) and 'Annadata' (Farmer).

'Garib Kalyan, Desh ka Kalyan'

- Government assisted 25 crore people out of multi-dimensional poverty in last 10 years.
- DBT of Rs. 34 lakh crore using PM-Jan Dhan accounts led to savings of Rs. 2.7 lakh crore for the Government.
- PM-SVANidhi provided credit assistance to 78 lakh street vendors. 2.3 lakh have received credit for the third time.
- PM-JANMAN Yojana to aid the development of particularly vulnerable tribal groups (PVTG).
- PM-Vishwakarma Yojana provides end-to-end support to artisans and crafts people engaged in 18 trades.

Welfare of 'Annadata'

- PM-KISAN SAMMAN Yojana provided financial assistance to 11.8 crore farmers.
- Under PM Fasal Bima Yojana, crop insurance is given to 4 crore farmers

- Electronic National Agriculture Market (e-NAM) integrated 1361 mandis, providing services to 1.8 crore farmers with trading volume of Rs. 3 lakh crore.

Momentum for Nari Shakti

- 30 crore Mudra Yojana loans given to women entrepreneurs.
- Female enrolment in higher education gone up by 28%.
- In STEM courses, girls and women constitute 43% of enrolment, one of the highest in the world.
- Over 70% houses under PM Awas Yojana given to women from rural areas.

PM Awas Yojana (Grameen)

- Despite COVID challenges, the target of three crore houses under PM Awas Yojana (Grameen) will be achieved soon.
- Two crore more houses to be taken up in the next five years.

Rooftop solarization and muft bijli

- 1 crore households to obtain 300 units free electricity every month through rooftop solarization.
- Each household is expected to save Rs.15000 to Rs.18000 annually.

Ayushman Bharat

- Healthcare cover under Ayushman Bharat scheme to be extended to all ASHA workers, Anganwadi Workers and Helpers.

Agriculture and food processing

- Pradhan Mantri Kisan Sampada Yojana has benefitted 38 lakh farmers and generated 10 lakh employment.
- Pradhan Mantri Formalisation of Micro Food Processing Enterprises Yojana has assisted 2.4 lakh SHGs and 60000 individuals with credit linkages.

Research and Innovation for catalyzing growth, employment and development

- A corpus of Rs.1 lakh crore to be established with fifty-year interest free loan to provide long-term financing or refinancing with long tenors and low or nil interest rates.
- A new scheme to be launched for strengthening deep-tech technologies for defence purposes and expediting 'atmanirbharta'.

Infrastructure

- Capital expenditure outlay for Infrastructure development and employment generation to be increased by 11.1 per cent to Rs.11,11,111 crore, that will be 3.4 per cent of the GDP.

Railways

- 3 major economic railway corridor programmes identified under the PM Gati Shakti to be implemented to improve logistics efficiency and reduce cost
 - Energy, mineral and cement corridors
 - Port connectivity corridors
 - High traffic density corridors
- Forty thousand normal rail bogies to be converted to Vande Bharat standards.

Aviation Sector

- Number of airports in the country doubled to 149.
- Five hundred and seventeen new routes are carrying 1.3 crore passengers.
- Indian carriers have placed orders for over 1000 new aircrafts.

Green Energy

- Coal gasification and liquefaction capacity of 100 MT to be set up by 2030.

- Phased mandatory blending of compressed biogas (CBG) in compressed natural gas (CNG) for transport and piped natural gas (PNG) for domestic purposes to be mandated.

Tourism sector

- States to be encouraged to take up comprehensive development of iconic tourist centres including their branding and marketing at global scale.
- Framework for rating of the tourist centers based on quality of facilities and services to be established.
- Long-term interest-free loans to be provided to States for financing such development on matching basis.

Investments

- FDI inflow during 2014-23 of USD 596 billion was twice of the inflow during 2005-14.

Reforms in the States for 'Viksit Bharat'

- A provision of Rs.75,000 crore rupees as a fifty-year interest-free loan is proposed to support milestone-linked reforms by the State Governments.

Revised Estimates (RE) 2023-24

- RE of the total receipts other than borrowings is Rs.27.56 lakh crore, of which the tax receipts are Rs.23.24 lakh crore.
- RE of the total expenditure is Rs.44.90 lakh crore.
- Revenue receipts at Rs.30.03 lakh crore are expected to be higher than the Budget Estimate, reflecting strong growth momentum and formalization in the economy.
- RE of the fiscal deficit is 5.8 per cent of GDP for 2023-24.

Budget Estimates 2024-25

- Total receipts other than borrowings and the total expenditure are estimated at Rs.30.80 and Rs.47.66 lakh crore respectively.
- Tax receipts are estimated at Rs.26.02 lakh crore.
- Scheme of fifty-year interest-free loan for capital expenditure to states to be continued this year with total outlay of Rs.1.3 lakh crore.
- Fiscal deficit in 2024-25 is estimated to be 5.1 percent of GDP

- Gross and net market borrowings through dated securities during 2024-25 are estimated at Rs.14.13 and Rs.11.75 lakh crore respectively.

Direct taxes

- FM proposes to retain the same tax rates for direct taxes
- Direct tax collection tripled, and return filers increased to 2.4 times, in the last 10 years
- Government to improve taxpayer services
 - Outstanding direct tax demands upto Rs 25000 pertaining to the period upto FY 2009-10 withdrawn
 - Outstanding direct tax demands upto Rs 10000 for financial years 2010-11 to 2014-15 withdrawn
 - This will benefit one crore tax payers
- Tax benefits to Start-Ups, investments made by Sovereign wealth funds or pension funds extended to 31.03.2025
- Tax exemption on certain income of IFSC units extended by a year to 31.03.2025 from 31.03.2024

Indirect taxes

- FM proposes to retain same tax rates for indirect taxes and import duties
- GST unified the highly fragmented indirect tax regime in India
 - Average monthly gross GST collection doubled to Rs 1.66 lakh crore this year
 - GST tax base has doubled
 - State SGST revenue buoyancy (including compensation released to states) increased to 1.22 in post-GST period(2017-18 to 2022-23) from 0.72 in the pre-GST period (2012-13 to 2015-16)
 - 94% of industry leaders view transition to GST as largely positive
 - GST led to supply chain optimization
 - GST reduced the compliance burden on trade and industry
 - Lower logistics cost and taxes helped reduce prices of goods and services, benefiting the consumers

Tax rationalization efforts over the years

- No tax liability for income upto Rs 7 lakh, up from Rs 2.2 lakh in FY 2013-14
- Presumptive taxation threshold for retail businesses increased to Rs 3 crore from Rs 2 crore
- Presumptive taxation threshold for professionals increased to Rs 75 lakh from Rs 50 lakh
- Corporate income tax decreased to 22% from 30% for existing domestic companies
- Corporate income tax rate at 15% for new manufacturing companies

Achievements in tax-payer services

- Average processing time of tax returns has reduced to 10 days from 93 days in 2013-14
- Faceless Assessment and Appeal introduced for greater efficiency
- Updated income tax returns, new form 26AS and prefiled tax returns for simplified return filing
- Reforms in customs leading to reduced Import release time
 - Reduction by 47% to 71 hours at Inland Container Depots
 - Reduction by 28% to 44 hours at Air Cargo complexes
 - Reduction by 27% to 85 hours at Sea Ports

Economy-then and now

- In 2014 there was a responsibility to mend the economy and put governance systems in order. The need of the hour was to:
 - Attract investments
 - Build support to the much-needed reforms
 - Give hope to the people

The government succeeded with a strong belief of 'nation-first'

- "It is now appropriate to look at where we were till 2014 and where we are now": FM
 - **The Government will lay a White Paper on the table of the house.**

Why is an Interim Budget Prepared?

- **Election Year Realities:** Article 112 mandates the presentation of the annual financial statement. However, Full-year budgets are impractical during election years due to potential changes in government.
- **Transition Period:** Interim budgets provide time for the incoming government to form and create the Union budget for the remaining financial year.
- Interim Budget may revise tax rates, unlike the Union Budget which outlines new policies, reforms, and allocations.

Importance of Interim Budget

- **Absence of Constitutional Provision:** While not constitutionally mandated, interim budgets are standard practice before elections.
- **Alternative Options:** Departing governments may opt for a vote-on-account instead of an interim budget to secure necessary funds.

Understanding Vote-on-Account

- Article 116 allows the Lower House to approve advance grants for estimated expenditures via a vote on account.
- **Purpose:** Allows the government to seek parliamentary approval for funds to cover expenses until the formation of a new government.
- **Characteristics:** It cannot change tax rates, lasts for two months (extendable to four), and focuses on essential expenditures.
- **Mechanism:** Grants funds for a part of the year, facilitating government operations during the transition period.

Inclusions and Exclusions in Interim Budget

- **Inclusions:** Estimates for government spending, revenue, fiscal deficit, financial performance, and future expectations.
- **Exclusions:** Major policy changes or new schemes that could influence voters, which are reserved for the full Union budget.

3.2 PAYMENTS BANK

In News: RBI Directive

- Paytm Payments Bank barred from offering core services, including accounts and wallets, from March.

Reasons for RBI Action

- RBI gave no specific reasons but concerns likely related to KYC compliance and IT-related issues.
- Paytm Payments Bank and parent company OCL under scrutiny for lack of information barriers within the group and data access to China-based entities.

What are Payments Banks?

- Payment banks are a type of differentiated bank in India introduced by the Reserve Bank of India (RBI) to further financial inclusion.
- They are allowed to provide a limited set of banking services, primarily focusing on payments and remittance services, but are not permitted to undertake lending activities like traditional banks.

Key Features of Payments Banks

- **Limited Deposits:** Accept deposits of up to Rs. 2 lakh per customer.
- **No Lending:** Not allowed to undertake lending activities.

- **Payments and Remittance:** Focus on providing payment and remittance services.
- **Deposit Insurance:** Deposits are insured under the Deposit Insurance and Credit Guarantee Corporation (DICGC) up to Rs. 5 lakh per depositor.
- **Technology-Driven:** Emphasis on leveraging technology to reach customers and provide services.
- **Financial Inclusion:** Aimed at promoting financial inclusion by providing banking services to unbanked and under banked segments.

Advantages of Payments Banks

- Increased financial inclusion by reaching remote and underserved areas.
- Convenience in banking services, especially for small transactions and remittances.
- Reduced dependence on cash transactions, leading to a more digital economy.

- Access to basic banking services for those who may not qualify for traditional bank accounts.

Challenges Faced by Payments Banks

- Limited revenue streams due to restrictions on lending activities.
- Need for significant investment in technology and infrastructure.
- Building customer trust and loyalty in a competitive market.

Role of Payments Banks in the Indian Banking Sector

- Complement traditional banks by focusing on specific segments and services.
- Drive innovation in digital banking and payments.
- Help in achieving the goal of financial inclusion by reaching the unbanked and under banked population.

3.3 PM-MATSYA KISAN SAMRIDHI SAH-YOJANA (PM-MKSSY)

Context

- The Union Cabinet on Thursday approved the Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY), a sub scheme under the Pradhan Mantri Matsya Sampada Yojana,

Details

- **Scheme Overview:** PM-MKSSY is a Central Sector Sub-scheme under PMMSY.
- **Objective:** Formalize the fisheries sector and support fisheries micro and small enterprises.
- **Investment:** Over Rs. 6,000 crores over FY 2023-24 to FY 2026-27 in all States/UTs.

Expenditure Involved:

- Estimated outlay of Rs. 6,000 crore, 50% financed publicly.
- Anticipated 50% from beneficiaries/private sector leverage.

Intended Beneficiaries:

- Fishers, fish farmers, fish workers, fish vendors, and others in fisheries value chain.
- Micro and Small enterprises in fisheries and aquaculture value chains.

Major Impact:

- Creation of National Fisheries Digital Platform.
- Formalization of fisheries sector, access to institutional credit.
- Shift from conventional subsidies to performance-based incentives.
- Improvement in value chain efficiency and safety of fish.

Aims and Objectives:

- Formalization of unorganized fisheries sector.
- Facilitating access to institutional financing.
- Providing incentives for purchasing aquaculture insurance.
- Incentivizing adoption of fish and fishery product safety and quality assurance systems.

Implementation Strategy:

- Four major components focusing on formalization, aquaculture insurance, value chain efficiencies, and safety and quality assurance systems.
- Specific objectives and activities for each component.

Background:

- Despite achievements, challenges like informality and poor access to credit persist.
- PM-MKSSY aims to address these challenges with a total outlay of Rs. 6,000 crore over four years, reflecting government's commitment to promoting growth and sustainability of the fisheries sector.

Pradhan Mantri Matsya Sampada Yojana (PMMSY)

About PMMSY:

- Flagship scheme for sustainable development in the fisheries sector.
- Spanning five years from FY 2020-21 to FY 2024-25, with an estimated investment of Rs. 20,050 crores.

Features of PMMSY:

- **Funding Allocation:** Varies by region, with different central and state shares.
- **Implementing Agencies:** Central Government entities, State and Union Territory Governments, and State Fisheries Development Boards.
- **Objectives:** Boost production and productivity, develop infrastructure, modernize the sector, and strengthen the value chain.

Cluster-Based Approach:

- Promotes collaboration and shared resources across the fisheries value chain.
- Focuses on generating employment through activities like seaweed and ornamental fish cultivation.

Quality and Diversification:

- Improvements in brood, seed, and feed quality.
- Encourages species diversification and critical infrastructure development.

Significance of PMMSY:

- **Fish Production Boost:** Aims to increase fish production to 22 million metric tons by 2024-25.
- **Annual Growth Rate:** Targets around 9% annual growth rate in fish production.
- **Export Earnings:** Aims to double India's export earnings in the fisheries sector.
- **Aquaculture Productivity:** Aims to raise national average aquaculture productivity.
- **Post-Harvest Loss Reduction:** Aims to reduce post-harvest losses.
- **Income Doubling:** Aims to double the incomes of fishers and fish farmers.
- **Employment Generation:** Expected to generate approximately 15 lakh direct employment opportunities.
- **Private Investment and Entrepreneurship:** Actively encourages private investment and entrepreneurship in the sector.

3.4 INSOLVENCY AND BANKRUPTCY BOARD OF INDIA (IBBI)

Context

- The Insolvency and Bankruptcy Board of India (IBBI) has mandated that Resolution Professionals (RPs) provide a copy of their report to both creditor and debtor in all cases involving personal guarantors.

Details

- This move aims to ensure that both parties are well-informed about the evaluation and recommendations made by the RP, promoting transparency and informed decision-making.

- Previously, RPs were only required to report to the applicant who initiated the insolvency proceedings, leaving either the debtor or creditor uninformed. This new circular aligns with the objective of the Insolvency and Bankruptcy Code (IBC) to balance the interests of all stakeholders.
- This circular ensures principles of natural justice, allowing both parties to understand the debt and default equation and present their case effectively before the National Company Law Tribunal (NCLT).

- This change also enables RPs to initiate negotiations or conditions of the repayment plan before the NCLT application is filed, potentially expediting the process.

Insolvency and Bankruptcy Board of India (IBBI)

Overview:

- The Insolvency and Bankruptcy Board of India (IBBI) is a statutory body established on October 1, 2016, under the Insolvency and Bankruptcy Code, 2016 (IBC).
- The primary objective of IBBI is to regulate the insolvency and bankruptcy proceedings for individuals, corporates, and partnerships in India.

Key Functions:

- **Regulation and Oversight:** IBBI regulates insolvency professionals, insolvency professional agencies, and information utilities involved in the insolvency process.
- **Insolvency Processes:** It facilitates corporate insolvency resolution, individual insolvency resolution, and bankruptcy processes.
- **Education and Awareness:** IBBI conducts educational programs and awareness

campaigns to promote understanding of the insolvency and bankruptcy regime.

- **Advisory Role:** IBBI advises the central government on matters related to insolvency and bankruptcy.
- **Rulemaking:** IBBI makes rules and regulations to implement the provisions of the IBC.

Structure:

- The IBBI consists of a chairperson and members appointed by the central government.
- It has various departments to handle different aspects of insolvency and bankruptcy proceedings, such as registration, regulation, and enforcement.

Significance:

- The establishment of IBBI and the implementation of the IBC have significantly improved the resolution process for stressed assets in India.
- IBBI's regulatory framework has brought transparency, efficiency, and accountability to the insolvency resolution process, boosting investor confidence in the Indian market.

3.5 PEER-TO-PEER (P2P) LENDING

Context

- Reserve bank of India deputy governor Rajeshwar Rao cautioned NBFCs against peer-to-peer (P2P) lending practices, which are not in line with regulatory guidelines.

Peer-to-peer (P2P) lending

- Peer-to-peer (P2P) lending is a practice where individuals borrow and lend money directly through online platforms, without involving traditional financial institutions. Here's how it works:
 - Borrowers apply for loans, which are listed on P2P platforms.
 - Lenders can choose to fund these loans partially or fully.
 - Borrowers repay the loans with interest, and the platform facilitates the process.

- P2P lending carries risks for both borrowers and lenders, but it can offer higher returns for lenders and alternative financing options for borrowers.

Challenges

- While peer-to-peer (P2P) lending offers several benefits, such as easier access to credit and potentially higher returns for investors, it also comes with some downsides:
 - **Default Risk:** Borrowers may default on their loans, leading to losses for lenders. Unlike traditional banks, P2P platforms may not offer the same level of protection against defaults.
 - **Lack of Regulation:** P2P lending is relatively new and may not be as heavily regulated as traditional financial

institutions. This lack of regulation can expose both borrowers and lenders to risks.

- **Limited Borrowing Options:** P2P lending may not offer the same range of loan products and terms as traditional banks. Borrowers may find it challenging to obtain large or long-term loans through P2P platforms.
- **Platform Risk:** P2P platforms themselves can pose risks. If a platform goes out of business or faces financial difficulties, lenders may lose their investments, and borrowers may face challenges in repaying their loans.
- **Limited Investor Protection:** Unlike bank deposits, investments in P2P lending are not typically insured. If a borrower defaults, investors may lose some or all of their investment.
- **Marketplace Dynamics:** P2P lending platforms rely on matching borrowers with lenders. Changes in market conditions or the platform's policies can affect the availability of loans or the returns for investors.

Way Ahead

- The future of peer-to-peer (P2P) lending hinges on several key factors:
 - **Regulation:** Continued oversight is crucial to protect users and ensure platform integrity.
 - **Risk Management:** Platforms must improve credit assessment and transparency to reduce default rates.
 - **Technology:** Innovations like blockchain and AI can enhance security and efficiency.
 - **Financial Inclusion:** P2P lending can expand access to finance, particularly for underserved populations.
 - **Investor Education:** Educating investors about risks and processes is essential for informed decision-making.
 - **Partnerships:** Collaborations with banks and institutions can improve liquidity and product offerings.
- Overall, P2P lending's future success depends on regulatory compliance, technological advancement, and a focus on inclusivity and education.

3.6 DEEP INDUSTRIALIZATION

Context

- Global economic perspectives have shifted towards deep industrialization and state-led interventions post-COVID-19.
- Examples include the U.S.'s Inflation Reduction Act, the European Green Deal, and India's Atmanirbhar Bharat initiative.
- India aims to promote rapid growth in both manufacturing and services sectors to leverage population demographics and Industry 4.0.

Deep industrialization

- Deep industrialization refers to a process where a country or region significantly expands and advances its industrial sector, leading to economic development, technological advancement, and structural

transformation of the economy. It typically involves the growth of industries such as manufacturing, mining, and infrastructure development, leading to higher production levels, increased employment opportunities, and improved living standards.

Key features of deep industrialization include

- **Diversification of Industries:** A wide range of industries develop, including heavy industries (e.g., steel, machinery) and light industries (e.g., textiles, food processing).
- **Technological Advancement:** Increased use of advanced technologies and automation to improve efficiency and productivity.
- **Infrastructure Development:** Construction of infrastructure such as roads, railways, ports,

and power plants to support industrial growth.

- **Employment Generation:** Industrialization creates jobs in manufacturing, construction, and related sectors, absorbing labor from agriculture and rural areas.
- **Urbanization:** Industrialization leads to the growth of urban areas as people move from rural to urban areas in search of employment.
- **Economic Growth:** Industrialization is often associated with higher GDP growth rates and increased per capita income.
- **Environmental Impact:** Industrialization can have negative environmental effects, such as pollution and resource depletion, requiring sustainable practices and regulations.
- **Global Competitiveness:** Deep Industrialization aims to enhance a country's competitiveness in global markets through efficient production and quality products.

The Imperative of Deep Industrialization for India's Economic Growth

- India stands at a critical juncture, poised for significant economic growth through deep industrialization. This transformation is crucial to boost competitiveness, create jobs, and drive sustainable development. Despite progress, challenges persist, necessitating a strategic approach to industrialization.

Enhancing Manufacturing Competitiveness:

- **Infrastructure and Manpower:** Addressing the shortage of high-tech infrastructure and skilled manpower is essential for improving competitiveness.
- **Stagnant Contribution to GDP:** India's industrial sector's contribution to GDP has remained stagnant at around 16% since 1991, highlighting the need for industrial growth.

Improving Transportation Infrastructure:

- **Strained Transport Networks:** India's transport infrastructure, including rail and road networks, is strained, hindering the efficient movement of goods and impacting competitiveness.

Supporting MSME Sector Growth:

- **Access to Credit:** The MSME sector faces difficulties in obtaining loans, hindering its growth and necessitating corrective measures.

Reducing Dependency on Imports:

- **Critical Sector Reliance:** India relies heavily on foreign imports for critical sectors, emphasizing the need for import substitution strategies.

Comparative Industrial Production:

- **Production Disparities:** India's industrial production of consumer goods contributes 38%, lower than in countries like Singapore, South Korea, and Malaysia, which highlights room for growth.

Improving Industrial Policies:

- **Addressing Inefficiencies:** Industrial policies marred by political interference and red tape need reform to enhance effectiveness.

Promoting Investment Flow:

- **Sectoral Investment Gaps:** While some industries attract substantial investments, basic and strategic industries like engineering and power lag, requiring attention.

Challenges Facing Industrialization:

- **Post-Pandemic Deindustrialization:** India faces "deindustrialization" post-pandemic, exacerbating inequalities.
- **Service-Driven Growth Challenges:** Service-driven growth has not absorbed labor effectively, unlike manufacturing.
- **Education Inequalities:** Deep inequalities in education hinder large-scale entrepreneurial ventures, unlike in China.
- **Cultural Barriers:** Mass education, crucial for industrialization, is lacking, hindering progress.
- **Employment Generation Challenges:** India's labor market is characterized by low-paid jobs, hindering job creation.

Way Forward:

- **Intensive Industrial Development:** Re-evaluate labor, production, and technology for intensive industrial development.

- **Skill Development Programs:** Tailor skill development programs to address the skill mismatch in the manufacturing sector.
- **Encouraging Investment:** Attract both domestic and foreign investment through attractive policies, tax incentives, and simplifying regulatory processes.
- **Streamlining Regulatory Processes:** Simplify bureaucratic complexities and labor laws to create a business-friendly environment.
- **Promoting R&D and Innovation:** Encourage R&D and innovation for technological advancement and increased productivity in the manufacturing sector.

3.7 FARMERS' PROTESTS AND THE DEMAND FOR MSP GUARANTEE

Context

- One of the key demands of Farmers' protests is a legal guarantee of minimum support price (MSP).

Need for Legal Guarantee of MSP

- Farmers operate in a buyer's market, lacking the power to influence prices, leading to them being price takers.
- They demand MSP to ensure a fair price for their produce, especially since they face retail prices for inputs but sell wholesale.

Criticism of MSP Guarantee

- Economists argue against cost-plus MSPs as they may distort production decisions, leading to oversupply of some crops and undersupply of others.
- They suggest income support schemes, like PM-Kisan Samman Nidhi, as a non-distorting alternative.

Legal Guarantee of Minimum Support Price (MSP): Pros and Cons

Pros:

- **Price Stability:** A legal guarantee of MSP provides price stability for farmers, ensuring they receive a fair price for their produce even in volatile market conditions.
- **Income Security:** It offers income security to farmers, enabling them to plan their finances and investments better, thereby reducing the risk of debt and poverty.
- **Agricultural Growth:** MSP can stimulate agricultural growth by incentivizing farmers to produce more of MSP-supported crops, which can contribute to overall food security.
- **Social Welfare:** It can help in reducing income disparities and improving the standard of living for farmers, contributing to social welfare.
- **Market Regulation:** MSP acts as a regulatory mechanism in the agricultural market, preventing price exploitation by intermediaries and ensuring farmers get a fair share of the final price.



Cons:

- **Market Distortion:** Critics argue that MSP can distort the market by encouraging overproduction of MSP-supported crops, leading to issues of surplus and storage.
- **Budgetary Pressure:** Implementing a legal MSP guarantee can put pressure on the government's budget, especially if market prices are significantly lower than MSP.
- **Inefficiency:** There are concerns about the efficiency of MSP operations, including issues of procurement, storage, and distribution, which can lead to wastage and inefficiencies.
- **Impact on Exports:** MSP-supported crops may become less competitive in the global market due to higher prices, impacting agricultural exports.
- **Dependency:** A reliance on MSP can make farmers dependent on government support, potentially reducing their incentive to adopt modern agricultural practices and technologies.

In conclusion, while a legal guarantee of MSP offers benefits such as price stability and income security for farmers, it also poses challenges related to market distortion, budgetary pressures, and inefficiencies. Policymakers need to carefully balance these factors while formulating agricultural policies to ensure sustainable growth and welfare for farmers.

How MSP is Guaranteed

- The government can force buyers to pay MSP, as in the case of sugar mills, but this may face implementation challenges.
- Alternatively, government agencies can buy produce at MSP, but this is unsustainable.

Price Deficiency Payments (PDP)

- PDP involves the government paying farmers the difference between market price and MSP, if the former is lower, without physically purchasing the crop.
- This method was tried in Madhya Pradesh and Haryana, providing a feasible alternative to physical procurement.

Haryana's Experience with PDP:

- Haryana's Bhavantar Bharpai Yojana (BBY) covers crops like bajra, mustard, and sunflower, providing PDP based on the difference between market price and MSP.
- The scheme has been effective in ensuring MSP to farmers without distorting markets.

Road Ahead

- A nationwide PDP scheme with Central funding could incentivize other states to adopt similar measures.
- **Building market infrastructure and systems for recording transactions** can enable all farmers to benefit from MSP, either through a legal guarantee or alternative mechanisms.

Conclusion

- Ensuring a fair price for farmers' produce is crucial for agricultural sustainability and rural livelihoods.
- While challenges exist, innovative solutions like PDP offer a pathway to addressing farmers' demands for MSP guarantee.

3.8 INDIA'S FARM SUBSIDIES AT THE WTO: PRESSURE AND CHALLENGES

Context

- India is under pressure regarding its farm subsidies at the World Trade Organization (WTO), with a group of 19 agri-exporting countries, including members of the Cairns Group, raising concerns about the country's public stockholding (PSH) programme and its impact on global food prices and food security.

WTO's Agricultural Subsidies

Regulation of Subsidies:

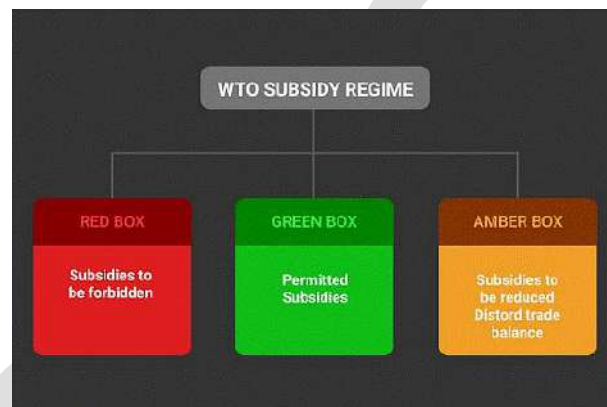
- The WTO regulates agricultural subsidies to ensure fair competition in global trade. Subsidies that distort trade are subject to limits set by the WTO to prevent unfair advantages for certain countries or producers.

Types of Subsidies:

- Domestic Support:** Includes direct payments to farmers, price support measures such as Minimum Support Prices (MSP), and input subsidies for fertilizers, seeds, etc.
- Export Subsidies:** Payments to producers to encourage exports, leading to lower global prices.
- Market Access Subsidies:** Subsidies that lower the cost of importing agricultural products, affecting global market prices.

WTO Agreement on Agriculture (AoA):

- The AoA sets limits on the total value of domestic support measures (de minimis) that countries can provide.
- Developed countries have a lower de minimis limit (5% of the total value of agricultural production) compared to developing countries (10%).



Box	Status	Payment Type
Amber	Trade-distorting	<ul style="list-style-type: none"> Marketing loan benefits Product-specific supports Crop and revenue insurance subsidies Irrigation subsidies Renewable energy programs
Blue	Market-distorting and production-limiting	<ul style="list-style-type: none"> Deficiency payments
Green	Non-trade-distorting	<ul style="list-style-type: none"> Environmental payments Natural disaster relief Decoupled income support Farm credit programs

Recent Challenges at the WTO

- Cairns Group's Criticism:** The Cairns Group has criticized India's PSH programme, alleging that it is highly subsidized and distorts global food prices, hurting the food security of other countries.
- Proposals to Slash Farm Support:** Last year, the Cairns Group proposed to halve the total global entitlement to subsidize trade-distorting farm support, triggering tensions among developing nations, including India.
- Per Farmer Subsidy vs. WTO Rules:** While India's per farmer subsidy is low compared to countries like the US, the WTO rules do not consider subsidies on a per-farmer basis, which puts developing countries at a disadvantage.

- **Ambiguity in Peace Clause:** India is protected by the 'Peace Clause' agreed upon during the Bali ministerial in 2013. However, ambiguity in the clause's provisions leaves India open to disputes over its subsidies.

India's Push for a Permanent Solution

- **Seeking Legal Protection for MSP:** India is fighting for better legal protection for its Minimum Support Price (MSP) programme, as demanded by farmers, to avoid disputes at the WTO.
- **Push for Amendments:** India is pushing for amendments to the formula to calculate the food subsidy cap and to include programmes implemented after 2013 under the 'Peace Clause'.
- **Potential Expenditure:** Experts warn of high expenditure if the government agrees to the farmers' demand for an MSP law, estimating a working capital requirement of Rs 6 lakh crore in Marketing Year 2023.

Future Challenges and Considerations

- **Peer Pressure vs. MSP Demand:** The government faces pressure at the WTO while also dealing with demands from farmers for better MSP support, which could strain the country's finances and impact food security.
- **Threat to Food Security:** A shift away from agriculture by farmers in Punjab and Haryana could pose a threat to the country's food security, highlighting the importance of balancing WTO obligations with domestic agricultural needs.
- **Dispute Settlement Challenges:** While India is not currently facing a dispute on the subsidy issue at the WTO due to the non-functional Dispute Settlement Body (DSB), questions from member countries over subsidy limits are likely to continue.

Way Ahead for India at the WTO

- **Seeking a Permanent Solution:** India should continue to push for a permanent solution at the WTO that provides legal protection for its MSP programme while ensuring fair competition in global trade.
- **Dialogue and Negotiation:** Engaging in constructive dialogue and negotiation with the Cairns Group and other stakeholders to address concerns and find mutually acceptable solutions.
- **Balancing Domestic Needs and International Obligations:** Striking a balance between meeting the demands of farmers for an MSP law and adhering to WTO rules to avoid disputes and maintain India's credibility in global trade.
- **Focus on Sustainable Agriculture:** Emphasizing sustainable agricultural practices and crop diversification to improve productivity, reduce dependence on subsidies, and enhance competitiveness in global markets.
- **Capacity Building:** Investing in infrastructure, technology, and skills development to enhance the efficiency and competitiveness of Indian agriculture, making it less reliant on subsidies.
- **Collaboration with Developing Countries:** Working closely with other developing countries to advocate for fairer trade rules and greater flexibility in farm support measures to support food security and rural livelihoods.
- **Policy Reforms:** Implementing policy reforms that promote market-oriented agriculture, encourage private investment, and improve access to credit and markets for farmers.
- **Enhanced Monitoring and Evaluation:** Strengthening monitoring and evaluation mechanisms to assess the impact of agricultural subsidies on trade, food security, and rural development, and to ensure compliance with WTO rules.

- **Engagement with Civil Society:** Engaging with civil society organizations, farmers' groups, and other stakeholders to raise awareness about the benefits and challenges of WTO rules and agricultural subsidies, and to build consensus on the way forward.

3.9 SPIRITUAL TOURISM IN INDIA

Context

- Addressing the 6th Hotel Association of India (HAI) Hoteliers' Conclave in New Delhi, Union Minister Smriti Irani said Spiritual tourism has a high potential for tourist footfall and future investment in India.

India's Spiritual Diversity

- India, a land of diverse cultures and traditions, offers a unique spiritual experience. The country is home to a myriad of religions, languages, and cultures, making it a hub for spiritual seekers worldwide.

Key Spiritual Destinations

- **Varanasi:** Known as the Spiritual Capital, Varanasi's ghats and temples along the Ganges River offer a glimpse into Hindu rituals and spirituality.
- **Rishikesh:** The Yoga Capital is renowned for its ashrams and meditation centers, attracting yoga enthusiasts and spiritual seekers.
- **Bodh Gaya:** The place where Buddha attained enlightenment, Bodh Gaya's Mahabodhi Temple is a sacred site for Buddhists.
- **Amritsar:** Home to the Golden Temple, a symbol of Sikhism's spiritual and communal values, Amritsar offers a unique spiritual experience.
- **Tirupati:** The Sri Venkateswara Temple in Tirupati is a major pilgrimage site for Hindus, known for its spiritual significance.
- **Haridwar:** Another holy city on the Ganges, Haridwar is known for its Kumbh Mela and spiritual atmosphere.
- **Ajmer:** The Dargah Sharif in Ajmer is a revered Sufi shrine, attracting devotees of all faiths.

Government Initiatives

- **PRASHAD Scheme:** Launched in 2014, the scheme aims to develop pilgrimage sites and

promote sustainable pilgrimage tourism in India. It focuses on integrating pilgrimage destinations and promoting local art and culture.

- **Swadesh Darshan Scheme:** Started in 2014-15, the scheme aims to develop theme-based tourist circuits, including spiritual and heritage circuits.
- **Champion Service Sector Scheme:** This scheme focuses on promoting tourism infrastructure and marketing to enhance tourist arrivals in India.

Challenges and Solutions

- **Post-Pandemic Recovery:** The tourism industry is still recovering from the pandemic, with households regaining confidence in travel. Governments can promote tourism through research and aggressive promotional campaigns.
- **Preservation of Heritage:** Governments need to protect heritage sites from industrial pollution and promote responsible tourism to preserve cultural heritage.
- **Enhanced Connectivity:** Initiatives like PM Gati Shakti aim to improve connectivity and make travel more efficient, boosting tourism.

Future Outlook

- With continuous efforts from the government and stakeholders, India's spiritual tourism sector has the potential to grow and attract more tourists from around the world, offering a unique spiritual experience and promoting cultural exchange.
- Projects like the Kashi Corridor, Mahakal Corridor, and Ram Temple in Ayodhya are boosting tourism and the local economy.
- The government is committed to boosting tourism and infrastructure, with 11 lakh crore

- rupees allotted to the infrastructure sector in the Interim Budget.
- There is increased investment in tier two and tier three cities for tourism and hospitality.

- Niche services, weddings, adventure sports, natural attractions, and medical tourism can make non-conventional tourist destinations more attractive.

3.10 FARM MECHANIZATION IN INDIA

Context

- The Indian Parliamentary Standing Committee on Agriculture, Animal Husbandry, and Food Processing reviewed farm mechanization and equipment from 2020-23.
- Ministry of Agriculture and Farmers Welfare briefed on modernization but highlighted the lack of foreign direct investment (FDI) in the sector. The committee approved the report on July 14, 2023.

Significance of Indian Agriculture

- India's farming and allied sectors support 17% of the global population and contribute 20% to the nation's GDP.
- Agriculture has an average growth rate of 2.8% and sustains nearly half of the population.

Current Status of Farm Mechanization in India

- 47% of agricultural operations in India are mechanized, lower than China (60%) and Brazil (75%).
- Mechanization levels vary, with Punjab and Haryana at 40-45% and negligible in states like those in the northeast.
- Small and marginal landholdings, covering 86% of total operational holdings, limit modern machinery use.

Challenges and Opportunities

- India aims to achieve 75-80% mechanization in 25 years, focusing on small farms.
- Private sector-led innovation requires clear policies and incentives.
- Modernization reduces costs, enhances productivity, and contributes 40-45% to farm activities.

Market Outlook

- India's agriculture machinery market is estimated at US\$16.73 billion in 2024, projected to reach US\$25.15 billion by 2029.
- Growth drivers include government policies, rising farm incomes, and the imperative role of mechanization.

Government Initiatives and Proposed Measures

- Initiatives like the Sub-Mission on Agricultural Mechanization (SMAM) promote modern equipment adoption.
- Proposed measures include standardizing equipment design, conducting testing, promoting standard parts use, and providing manufacturing technology training.

In a nutshell,

Farm Mechanization in India:

Pros:

- **Increased Efficiency:** Mechanization helps in completing tasks faster and more efficiently, increasing overall productivity.
- **Labour Savings:** Mechanization reduces the need for manual labour, which is becoming increasingly scarce and expensive.
- **Cost Reduction:** While initial investment in machinery is required, mechanization can lead to long-term cost savings by reducing labour costs and increasing output.
- **Better Quality:** Machinery can perform tasks with greater precision, leading to better-quality produce.
- **Timeliness:** Mechanization allows for timely operations such as planting, irrigation, and harvesting, which are critical for optimal crop growth.

- **Higher Yield:** With efficient and timely operations, mechanization can help in achieving higher yields.

Cons:

- **High Initial Investment:** Purchasing farm machinery can be expensive, especially for small-scale farmers.
- **Maintenance Costs:** Machinery requires regular maintenance, which can add to the overall cost.
- **Skill Requirement:** Operating modern farm machinery requires specific skills, which may not be readily available among farmers.
- **Environmental Impact:** Some mechanization practices, such as heavy tillage, can lead to soil degradation and environmental pollution.
- **Dependency on Technology:** Farmers may become dependent on technology, which can be a risk in case of breakdowns or technological advancements.

Way Ahead:

- **Promoting Access:** Providing subsidies and easy financing options to farmers to access modern farm machinery.
- **Training and Skill Development:** Offering training programs to farmers on the operation and maintenance of farm machinery.
- **Research and Development:** Investing in R&D to develop affordable and efficient farm machinery suitable for Indian conditions.
- **Custom Hiring Centers:** Establishing custom hiring centers where farmers can rent machinery, reducing the burden of ownership.
- **Policy Support:** Implementing policies that promote sustainable mechanization practices and address environmental concerns.

Conclusion

- India's agriculture sector plays a crucial role in the economy, requiring continuous modernization and mechanization to meet growing demands and enhance productivity.

3.11 SHORT ARTICLES

Nano DAP

Context

- Finance Minister Nirmala Sitharaman, presenting the interim budget announced the expansion of the application of Nano DAP on various crops in all agro climatic zones.

DAP and Nano DAP

- **DAP:** Commonly used phosphorus-rich fertilizer, crucial for root establishment and plant growth.
- **Nano DAP:** Liquid formulation introduced by IFFCO, containing 8% Nitrogen and 16% Phosphorus by volume.

Advantages of Nano DAP

- **Enhanced Efficiency:** Nano DAP's particle size (< 100 nm) facilitates better assimilation, leading to improved seed vigor, chlorophyll levels, and crop yields.
- **Cost-Effectiveness:** Priced at Rs 600 for a 500 ml bottle, it's more affordable than

conventional DAP, easing the government's subsidy burden.

- **Convenience:** Liquid form and smaller packaging make Nano DAP easier to transport, store, and apply, offering practical benefits to farmers.

Significance in Agriculture

- Locally produced Nano DAP aims to reduce India's dependence on imported fertilizers, contributing to self-sufficiency.
- Expected to enhance food grain production and promote self-reliance in fertilizer production, aligning with national objective

Blue Economy

Context:

- Finance Minister Nirmala Sitharaman emphasized environment-friendly development through the promotion of 'blue economy' in the Interim Budget.

Blue Economy:

- Blue economy encompasses **economic activities related to oceans, seas, and coasts with a focus on sustainability.**
- World Bank defines it as the sustainable use of ocean resources for economic growth while preserving the health of ocean ecosystems.
- It encompasses economic activities related to oceans, seas, and coasts, including fisheries, aquaculture, tourism, renewable energy, and maritime transport.

Importance of Blue Economy:

- Provides food security: Fisheries and aquaculture contribute significantly to global food security, especially for coastal communities.
- Economic growth: Blue economy sectors generate substantial economic value and employment opportunities.
- Climate change resilience: Healthy oceans play a crucial role in mitigating climate change impacts and building resilience in coastal areas.

Sustainable Development Goals (SDGs):

- Blue economy is linked to several SDGs, including SDG 14 (Life Below Water) that focuses on conservation and sustainable use of oceans, seas, and marine resources.

Challenges and Threats:

- Overfishing and illegal, unreported, and unregulated (IUU) fishing practices.
- **Pollution:** Marine pollution from land-based sources, plastics, and oil spills.
- **Climate change:** Ocean acidification, rising sea levels, and coral reef degradation.

Global Initiatives and Policies:

- United Nations' Sustainable Development Goal 14 aims to conserve and sustainably use the oceans, seas, and marine resources.
- The European Union's Blue Growth strategy promotes sustainable growth in the marine and maritime sectors.

Innovations and Technologies:

- Technological advancements such as **satellite monitoring, unmanned underwater vehicles, and aquaculture technologies** are enhancing

the sustainability and productivity of blue economy sectors.

Importance of Blue Economy for India:

- India's long coastline, diverse marine life, and tourism opportunities make blue economy highly significant.
- It offers opportunities for economic growth, improved livelihoods, and job creation.

Budget Proposal for Blue Economy:

- A scheme for restoration, adaptation measures, coastal aquaculture, and mariculture will be launched.
- Five integrated aquaparks will be set up, and the **Pradhan Mantri Matsya Sampada Yojana will be enhanced to double exports and generate employment.**

Tax Buoyancy

Context

- Revenue Secretary Sanjay Malhotra Said The Formalization Of The Economy Led To Tax Buoyancy.

Tax buoyancy

- Tax Buoyancy Is A **Measure Of How Much Tax Revenue Increases In Response To A Rise In GDP (Gross Domestic Product).**
- It Reflects The Responsiveness Of Tax Collections To Changes In Economic Activity And Is Often Used As An Indicator Of The Efficiency Of The Tax system.

Calculation of Tax Buoyancy:

- **Tax Buoyancy** = Percentage Change In Tax Revenue / Percentage Change In GDP
- A Tax System Is Considered To Be Buoyant **If Tax Revenue Grows Faster Than GDP, Indicating A Positive Relationship Between Tax Collections and economic Growth.**

Importance of Tax Buoyancy:

- **Economic Indicator:** Tax Buoyancy Reflects The Health Of The Economy, As A Buoyant Tax System Indicates Robust Economic Activity.
- **Fiscal Policy:** Governments Use Tax Buoyancy To Assess The Effectiveness Of Tax Policies And Their Impact On Revenue Generation.

- **Budget Planning:** It Helps In Forecasting Tax Revenues, Which Is Crucial For Budget Planning And Allocation Of Resources.

Factors Affecting Tax Buoyancy:

- **Economic Growth:** Strong Economic Growth Usually Leads To Higher Tax Buoyancy, As Increased Economic Activity Results In Higher Tax Revenues.
- **Tax Structure:** The Composition Of Taxes (Direct Vs. Indirect Taxes) And Tax Rates Can Affect Tax Buoyancy.
- **Policy Changes:** Changes In Tax Policies, Tax Administration, And Compliance Measures Can Influence Tax Buoyancy.

Implications of Tax Buoyancy:

- **Positive Buoyancy:** Indicates A Healthy Tax System Where Tax Revenues Grow Faster Than GDP, Providing Fiscal Space For Government expenditure.
- **Negative Buoyancy:** Indicates A Weak Tax System Where Tax Revenues Grow Slower Than GDP, Requiring Policy Intervention To Improve Tax Efficiency.

Policy Implications:

- Governments Can Use Tax Buoyancy As A Tool To Assess The Impact Of Tax Reforms And Adjust Tax Policies Accordingly.
- It Can Help In Designing Tax Systems That Are Responsive To Economic Conditions And Promote Sustainable Revenue Growth.

Public Debt

Context

- The next government post the 2024 elections will inherit legacy burdens, including high public debt exceeding 80% of GDP.

Previous Debt Trends

- During the earlier NDA government under Vajpayee, general government debt was 84.4% of GDP in 2003-04, falling to 66.4% in 2010-11 during the UPA regime.
- The debt-GDP ratio rose gradually to 70.4% in 2018-19 at the end of the UPA's tenure and 81% in the following two fiscal years of the Modi government's second term.

- IMF projects the ratio at 82% in the current fiscal and 82.4% for 2024-25.

Dealing with High Government Debt

Understanding Public Debt:

- It includes outstanding domestic and foreign loans, interest, and principal amounts borrowed by the Centre and states.

FRBM Law:

- Enacted in 2003, aimed to bring down general government debt to 60% of GDP by 2024-25, with the Centre's outstanding debt not to exceed 40%.

Current Debt Scenario:

- Centre's total liabilities doubled from Rs 90.84 lakh crore to Rs 183.67 lakh crore between 2018-19 and 2024-25.
- Centre's outstanding debt rose from 48.1% of GDP in 2018-19 to 56% in 2024-25, well above the original 40% target.

Impact on Interest Payments:

- Interest-to-GDP ratio increased from 3-3.1% till 2019-20 to 3.6% in 2021-22, due to rising debt levels.

Reasons for Debt Increase:

- Covid-induced disruptions led to increased borrowing for public health and social safety nets amid revenue decline.

Ways to Control Debt:

- Fiscal consolidation, with a new target to achieve a fiscal deficit-to-GDP ratio of "below 4.5%" by 2025-26.
- High nominal GDP growth and real output increases can help reduce the debt-to-GDP ratio.

Challenges and Outlook:

- India needs a combination of fiscal consolidation and growth strategies to manage its debt, which is exacerbated by the Covid pandemic.

Standing Committee on Labour, Textiles & Skill Dev. Recommendations

In News

Standing Committee Recommendations on Cotton Sector:

- Instructed the government to develop an umbrella coverage for the cotton sector.
- Recommended a comprehensive policy for reviving closed jute mills.
- Suggested utilizing unused generators and exploring new markets for silk exports.
- Proposed incentivizing cotton farmers and providing handholding support, irrespective of their location.

- Called for a comprehensive study on issues related to cotton production, productivity, and soil management.

Standing Committee Recommendations on Jute Sector:

- Highlighted the importance of the jute sector in the national economy.
- Urged the textiles ministry to expedite components of the National Textile Policy.

Committee on Estimates Recommendations on Textile Industry:

- Recommended extending duty exemptions and import duty rationalizations to curb low-cost and undervalued import of Chinese knitted fabric.



Annual Survey of Industries (ASI) 2020-21 and 2021-22 Results

Context

- Ministry of Statistics and Programme Implementation (MoSPI) released ASI 2020-21 and ASI 2021-22 results, with field work conducted during April 2022 to November 2022 and March 2023 to September 2023 respectively.

Objective:

- ASI aims to provide insights into manufacturing industries' composition, growth, and structure in terms of output, value added, employment, and more.

Key Highlights from ASI 2020-21 and 2021-22:

- **ASI 2020-21:** Despite the challenges posed by the pandemic, the Gross Value Added (GVA) grew by 8.8% in current prices compared to the previous year. This growth was primarily driven by a significant fall in input costs, which more than offset the contraction in output.

- **ASI 2021-22:** The Indian manufacturing sector exhibited remarkable resilience, with the GVA increasing by 26.6% over the previous year. This growth was supported by a substantial increase in industrial output, which grew by more than 35% in value terms during this period in current prices.
- The main drivers of growth in 2021-22 were **industries such as Manufacture of Basic metal, Coke & Refined Petroleum Products, Pharmaceutical Products, Motor vehicles, Food Products, and Chemical and Chemical products.** These industries contributed approximately 56% of the total GVA of the sector and showed significant GVA and output growth compared to 2020-21.
- Employment in the sector witnessed a robust growth of 7.0% year-on-year in 2021-22, surpassing the pre-pandemic levels of 2018-19 by more than 9.35 lakh. Average emoluments also increased, with the average salary per employee rising by 8.3% in 2021-22 compared to the previous year.

State-wise Analysis:

- **Gujarat remained at the top** in terms of GVA in 2020-21 and ranked second in 2021-22, while Maharashtra ranked first in 2021-22 and second in 2020-21. Tamil Nadu, Karnataka, and Uttar Pradesh occupied the top positions in both years, collectively contributing about 53% of the total manufacturing GVA of the country in both periods.
- In terms of employment, the top five states were Tamil Nadu, Gujarat, Maharashtra, Uttar Pradesh, and Haryana, contributing about 54% of total manufacturing employment in both ASI 2020-21 and ASI 2021-22.

Comparison of Key Parameters (ASI 2017-18 to 2021-22):

- Various key parameters such as Fixed Capital, Invested Capital, Total Persons Engaged, Total Emoluments, Input, Output, GVA, Depreciation, and Net Value Added (NVA) showed a general increasing trend from ASI 2017-18 to ASI 2021-22 in current prices, indicating growth and expansion in the manufacturing sector over the years.

Note: ASI covers factories under Factories Act, Bidi & Cigar Workers Act, and certain electricity undertakings and units with 100+ employees. It uses a sampling strategy and collects data through a dedicated web-portal, with necessary quality checks.

Indian Oil Market Outlook

Context

- The International Energy Agency (IEA) forecasts that India's crude oil demand growth will surpass China's by 2027, becoming the primary driver of global oil demand growth.
- By 2023, India is expected to increase its oil demand by nearly 1.2 million barrels per day (bpd), contributing over a third of the projected global demand growth of 3.2 million bpd by the end of the decade.

Demand Outlook:

- India's total oil demand is projected to reach 6.64 million bpd in 2030, up from 5.48 million bpd in 2023.
- The growth will be driven by diesel/gasoil, which will account for almost half of the rise in demand and over one-sixth of total global oil demand growth through 2030.

Factors Impacting Demand:

- The growth in India's oil demand will be influenced by factors such as increasing electric vehicle penetration, energy efficiency improvements, and growth in biofuels consumption.
- These factors are projected to avoid around 500,000 bpd of additional oil demand by 2030, with electric vehicles alone accounting for 200,000 bpd.

Oil Imports and Production:

- Robust demand growth and declining domestic production are expected to push India's crude oil imports to 5.8 million bpd by 2030, a 26% increase from current levels.
- Despite efforts to attract foreign investment, domestic production is expected to decline, accounting for just 13% of supply needs by 2030.

Resilience and Strategic Reserves:

- Given the increasing reliance on oil imports, the IEA emphasizes the need for India to enhance its oil resilience.
- This includes strengthening its strategic petroleum reserves (SPR) programme, which currently equates to 66 days of net-import cover, with plans to expand capacity to hold 6.5 million tonnes of crude oil.

Conclusion:

- India's growing oil demand underscores the need for strategic planning to ensure energy security and resilience in the face of market disruptions.
- The country's transition towards cleaner energy sources and efficient oil use will play a crucial role in shaping its future oil demand and import dynamics.

International Energy Agency (IEA)

The International Energy Agency (IEA) is an autonomous organization that works to ensure reliable, affordable, and clean energy for its 30 member countries and beyond. **Established in 1974** in response to the oil crisis, the IEA acts as a global energy policy advisor, helping countries make informed decisions to secure energy supplies. It conducts research, gathers data, and analyzes energy policies to provide insights into energy markets, energy efficiency, renewables, and other key energy issues. The IEA also plays a crucial role in coordinating international efforts to address climate change and promote sustainable energy solutions.

Payment Aggregator

Context

- Two fintech startups, Decentro and Juspay, along with enterprise SaaS firm Zoho, have received final authorization from the RBI for payment aggregator (PA) licenses.

Payment Aggregator/Merchant Aggregator Overview:

- A payment aggregator (or merchant aggregator) is a third-party service provider that enables merchants to accept payments from customers by integrating payment processing into their websites or apps.
- It bridges the gap between merchants and acquirers, allowing merchants to process transactions through the aggregator's Merchant Identification Number (MID).
- Payment aggregators simplify payment acceptance for merchants, as they do not require a separate merchant account, and handle payment processing and settlements.

Laws and Regulations:

- Payment aggregators in India must be incorporated under the Companies Act, 1956/2013 and require a license from the Reserve Bank of India (RBI).
- Non-bank payment aggregators specifically require unique authorization from RBI, while bank PAs are considered part of normal banking relationships.

Eligibility:

- Companies applying for aggregator authorization must have a minimum net worth of Rs 15 crore in the first year of application and Rs 25 crore by the second year.
- They must also meet the "fit and proper" criteria and comply with global payment security standards.

Payment Gateway vs Payment Aggregator:

- A payment gateway is a payment processing software that deals with online transactions and offers restricted payment options.
- Payment gateways only provide technology, while payment aggregators receive payments from consumers on behalf of merchants and settle them into the merchant's account.

Basis of Distinction	Payment Aggregator	Payment Gateway
Primary Function	Acts as an interface	Acts as intermediary
Scope	Both online/offline transactions	Only online transactions
Multiple Payment Options	Yes	No. limited payment options
Owned By	Generally, ownership lies with fintech companies and financial service providers	Banks, vendors, payment aggregators, etc.
Authorization	Payment Card Industry – Data Security Standard (PCI DSS) certification	RBI authorization under PSSA is required
Examples	Innoviti, Bill Desk, PayUMoney, etc.	HDFC, ICICI, Axis banks, Razorpay etc.
Integrated Solution	Full integration is available here	Relatively less integration compared to aggregators

Standing Committee Report on Fintech Dominance in India

Context

- The Standing Committee on Communications and Information Technology raised concerns about the dominance of fintech apps owned by foreign entities in the Indian ecosystem.
- It recommended **promoting local players to create a more balanced ecosystem.**

UPI's Market Share and Regulatory Feasibility:

- The Unified Payments Interface (UPI) commanded a **73.5% share of total digital payments in terms of volume but only 6.67% in terms of value in FY 2022-23.**
- The Committee emphasized effective regulation of digital payment apps, noting it would be **more feasible for regulatory bodies to control local apps compared to foreign apps operating in multiple jurisdictions.**

Dominance of Foreign Fintech Companies:

- Fintech companies owned by foreign entities like Walmart-backed PhonePe and Google Pay dominate the Indian fintech sector.
- PhonePe holds the leading market share in volume terms, followed by Google Pay, with BHIM UPI having a minimal market share.

Regulatory Measures and Compliance:

- The NPCI issued a **30% volume cap on transactions facilitated using UPI in November 2020**, with compliance originally due by December 31, 2022, but extended to December 31, 2024.
- This measure **aims to address risks and protect the UPI ecosystem as it scales up.**

Concerns about Fraud:

- The Committee observed that **fintech companies were being used for money laundering**, citing an example involving an Abu Dhabi-based app called Pyppl.
- The fraud-to-sales ratio has remained low but **is a concern for law enforcement agencies.**

Implications for the Ecosystem:

- Local fintech players have a natural advantage in understanding the Indian market, while foreign players excel in new technologies and global connectivity.

- McKinsey's Global Payments Report noted that **UPI's minimal transaction fees represent an uplift from no-fee cash events and eliminate hidden costs, enhancing security and increasing access to digital commerce channels.**

Conclusion:

- The report underscores **the need to promote local players in the fintech sector to create a balanced ecosystem.**
- **Effective regulation and compliance** are crucial to address risks and protect the UPI ecosystem.
- The evolving landscape calls for a mix of local and foreign fintech players to cater to diverse needs across different areas of financial services.



Global Pulses Conference

Context

- The Global Pulses Conference suggested that India augment production of pulses to meet the nutritional requirements.

Global Pulses Conference

- The Global Pulses Conference, an **annual meeting of pulses producers, processors and traders**, was **jointly organised by the National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) and the Global Pulse Confederation (GPC).**
- India would benefit from the global conference with the sharing of the best practices and technological advancements in the field from other countries.

Global Pulse Confederation (GPC)

- The Global Pulse Confederation (GPC) represents the entire pulse industry value chain, including growers, researchers, logistics suppliers, traders, exporters, importers, government bodies, multilateral organizations, processors, canners, and consumers.
- The GPC has 24 national association members and over 500 private sector members. It is headquartered in Dubai and

licensed by the Dubai Multi Commodity Centre (DMCC).

Status of Pulses in India

- Over the last decade pulses production had grown by 60% from 171 lakh tonnes in 2014 to 270 lakh tonnes in 2024.
- India had become self-reliant in chickpeas



(chana) and many other pulses crops, with only a slight deficiency remaining in pigeon peas (tur) and black gram.

- Consistent efforts are being made **to attain self-sufficiency in pulses by 2027**.
- The government has increased the supply of new varieties of seeds, while also focusing on expanding cultivation of tur and black gram.

INITIATIVES TO BOOST PULSE PRODUCTION

- **National Food Security Mission (NFSM):** NFSM includes pulses as one of its focus crops and aims to increase the production of pulses through area expansion and productivity enhancement measures.
- **National Mission on Oilseeds and Oil Palm (NMOOP):** While primarily focused on oilseeds, NMOOP also includes pulses to some extent, promoting the cultivation of pulses alongside oilseeds.
- **Sub-Mission on Seeds and Planting Material (SMSP):** SMSP aims to enhance the production and supply of quality seeds of pulses to farmers, ensuring higher productivity.
- **Rashtriya Krishi Vikas Yojana (RKVY):** RKVY provides financial assistance to states to enhance agriculture and allied sectors, including pulses production.
- **Paramparagat Krishi Vikas Yojana (PKVY):** PKVY promotes organic farming, including the cultivation of pulses, to improve soil health and sustainability.
- **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY):** PMKSY aims to expand irrigation coverage and improve water use efficiency, benefiting pulses cultivation.
- **Mega Food Parks Scheme:** This scheme includes facilities for processing pulses, enhancing their value and marketability, thus incentivizing increased production.
- **Price Support Scheme (PSS):** PSS provides farmers with a minimum support price for pulses, ensuring income security and encouraging higher production.
- **Interest Subvention Scheme:** This scheme provides interest subvention to farmers to avail of short-term crop loans, including for pulses cultivation, at a reduced rate.

Household Consumption Expenditure Survey (HCES)

Context:

- The recently released Household Consumption Expenditure Survey (HCES) for August 2022 to July 2023 provides critical insights into consumption patterns, economic dynamics, and social welfare implications in India.

Survey Overview:

- Conducted every five years by the National Statistical Office (NSO), the HCES collects data on consumption spending patterns of households across urban and rural areas.
- Sample size: 2.6 lakh households (1.5 lakh rural, 1.1 lakh urban).

Background:

- Previous survey: 2011-12.
- Delay: The 2017-18 survey was scrapped due to data quality issues.
- Pandemic-related delays: The survey couldn't be conducted in 2020-21 and 2021-22.
- Conducted from July 2022 to 2023.



Bitcoin Halving

Context

- The next Bitcoin Halving is due to take place around April this year.

Bitcoin Halving Overview:

- The Bitcoin Halving refers to the 50% reduction in the reward paid to Bitcoin miners who process transactions for the blockchain.

- It occurs approximately every four years and is designed to limit the supply of Bitcoin, making it more scarce over time.

What is Bitcoin Mining:

- Bitcoin miners use advanced computer equipment to solve complex mathematical puzzles and add transactions to the blockchain.
- The miner who solves the puzzle first and claims the reward, currently set at 6.25 BTC, which fluctuates based on BTC prices.

Bitcoin Halving Impact:

- Reduces the rate at which new BTC are released, increasing scarcity and potentially driving up prices.
- Has occurred in 2012, 2016, and 2020, and reduces the mining reward from 50 BTC to 3.125 BTC.

Bitcoin Halving and Investors:

- Experienced traders may increase their Bitcoin holdings in anticipation of a price spike, while others may "short" Bitcoin.
- The impact on the crypto market is uncertain, with past halvings showing varied outcomes due to multiple factors influencing Bitcoin prices.

Conclusion:

- The Bitcoin Halving is a significant event in the cryptocurrency world, impacting miners, traders, and the overall market.
- Predicting its exact impact is challenging, and investors are advised to conduct their research and make informed decisions.

Venture Debt (VD) Financing

Context

- Venture debt globally stood at about \$60-65 billion in 2023, according to the 'India Venture Debt report 2024'

Venture Debt (VD) Financing Overview:

- VD is debt financing for startups after they've raised venture capital.
- It's less dilutive than equity financing.

- Typically includes an interest rate and repayment schedule.

Benefits:

- Extends cash runway without diluting equity.
- Supports growth initiatives like expansion or new product launches.
- Can bridge gaps between equity rounds.

Considerations:

- Must be repaid according to loan terms.
- Costs and impact on cash flow should be carefully considered.
- Collateral or personal guarantees may be required.

Potash Derived from Molasses (PDM)

Context

- Sugar mills can sell Potash Derived from Molasses (PDM) to fertiliser companies as an additional source of revenue.

Key Pointers

- **New Revenue Source:** Sugar mills can sell PDM to fertilizer companies, adding to their cash flows.
- **Subsidy:** Mills can claim a subsidy of Rs 345 per tonne under the Nutrients Based Subsidy Scheme, enhancing profitability.
- **Price and Production:** The price for selling PDM to fertilizer companies is set at Rs 4,263 per tonne, aiming for 10-12 LMT potash manufacturing in the next 3 years.
- **Potash Content:** PDM contains 14.5% potash, making it a viable alternative to Muriate of Potash (MOP).
- **Utilization of Waste Chemicals:** PDM is derived from ash in molasses-based distilleries, utilizing waste chemicals from ethanol production.
- **Environmental Impact:** This initiative supports Zero Liquid Discharge (ZLD) by using waste chemicals for productive purposes.
- **Benefit for Farmers:** The sale of PDM not only benefits sugar mills but also helps in timely payments to farmers.

3.12 SNIPPETS



Wheat Blast

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- Global wheat output to drop 13% due to wheat blast disease.
- Wheat blast is a fungal disease caused by *Magnaporthe oryzae Triticum* (MoT), primarily affecting wheat crops.
- Originating in Brazil in the 1980s, wheat blast has spread to South America and South Asia.
- Symptoms include elliptical lesions on wheat leaves, stems, and spikes, leading to reduced grain filling and yield loss.
- Warm, humid weather and poor field hygiene contribute to disease spread.
- Can cause yield losses of up to 100%, devastating entire wheat fields.
- Crop rotation, resistant varieties, and fungicidal sprays are key management strategies.



Sarathi Portal

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- The Centre launched the SARATHI portal and helpline number 14447 to improve insurance accessibility for farmers under PMFBY.
- SARATHI aids insurance companies in offering tailored products to farmers.
- Helpline 14447 assists farmers with concerns and grievance redressal.
- Streamlines insurance processes for farmers.
- Acts as a single-window platform for insurance products.
- Facilitates digital payments and claim resolution.
- Introduces insurance products in phases, starting with personal accident and hospital cash policies.

Market Capitalization



Market Capitalization

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- Reliance Industries Limited (RIL) became the first Indian company to exceed Rs 20 lakh crore in market capitalization, driven by a record high share price.
- Market capitalization, or market cap, is the total value of a company's outstanding shares of stock.
- It is calculated by multiplying the current share price of the company by the total number of outstanding shares.
- Market capitalization is used to determine the size of a company and is often used by investors to gauge the company's value and potential for growth. Companies are typically classified into categories based on their market capitalization, such as large-cap, mid-cap, and small-cap.



HSN Codes

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- The Commerce and Industry Ministry is considering expanding the classification codes (HSN codes) for rice. This would separate non-traditional varieties of non-basmati rice from the popular staple variety, allowing for exclusion from export restrictions when they are considered for the latter.
- The Harmonized System of Nomenclature (HSN) is an internationally accepted system for classifying goods in international trade and used to classify goods for taxation, statistical, and other regulatory purposes.
- The HSN code is a 6-digit code, further subdivided into chapters, headings, and sub-headings.
- The first two digits represent the chapter, the next two digits represent the heading, and the last two digits represent the sub-heading.
- The HSN code system plays a crucial role in international trade by providing a standardized classification system for goods.




TPAP License

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- Paytm is looking to apply for a third-party application provider (TPAP) licence from the National Payments Corporation of India (NPCI).
- A TPAP license allows external developers to create apps or services that work with a platform. It ensures compliance with rules and standards while enabling innovation and value-added services.

National Payments Corporation of India (NPCI)

- NPCI, a collaboration between the RBI and IBA, operates retail payment systems in India under the Payment and Settlement Systems Act, 2007. It functions as a non-profit entity and initially had ten core promoter banks, later broadening its ownership to 56 member banks. NPCI manages the RuPay payments infrastructure, akin to Visa and MasterCard.



Flue Cured Virginia (FCV) Tobacco

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- The Michaung cyclone led to heavy rains in Andhra Pradesh, causing severe damage to the FCV tobacco crop in several districts.
- About: Flue Cured Virginia (FCV) Tobacco is mainly produced in India in 2 states, Andhra Pradesh and Karnataka.
- Commercial Importance: FCV tobacco is a significant commercial crop in Karnataka, particularly in the Southern Transitional Zone (STZ) encompassing Mysore, Hassan, Chikkamagalore, and Shivamogga districts.
- Cultivation Season and Soil Type: It is grown as a rainfed crop during the kharif season, mainly on red sandy loam soils in the region.
- Variety: The FCV tobacco cultivated in Karnataka Light Soils is known as 'Mysore style tobacco,' recognized for its superior quality filler in the international market.

3.13 1 MAINS & 5 MCQs

Q1. Discuss the impact of farm mechanization on agriculture in India. How has the adoption of farm machinery transformed agricultural practices and productivity in the country? What are the challenges associated with farm mechanization, and what measures can be taken to overcome them?

Introduction:

- Define farm mechanization and its importance in Indian agriculture.
- Mention key areas where farm mechanization is adopted.

Impact on Agriculture:

- Discuss efficiency and productivity improvements.
- Highlight reduced drudgery and enhanced crop yield and quality.

Transformation of Agricultural Practices:

- Describe changes from traditional to modern farming methods.
- Mention precision farming techniques and their benefits.

Challenges:

- Identify cost, awareness, and access to credit as key challenges.
- Discuss impact on rural employment.

Measures to Overcome Challenges:

- Suggest subsidies, training, and easy credit access.
- Highlight government policies promoting mechanization.

Conclusion:

- Summarize benefits and emphasize sustainable practices for future.

Q2. Which of the following best describes the concept of "Deep Industrialization"?

- A) A strategy aimed at rapid industrial growth by focusing on heavy industries.
- B) A process of integrating advanced technologies and sustainable practices in industrial production.
- C) A policy to promote industrialization in remote and underdeveloped regions.
- D) A concept advocating for the expansion of industrial activities into deeper layers of the earth's crust.

Q3. Which of the following statements about Venture Debt (VD) Financing is correct?

- A) VD is typically used by startups as their first round of funding.
- B) VD is more dilutive than equity financing.
- C) VD helps in extending cash runway without diluting equity.
- D) VD does not require repayment according to loan terms.

Q4. Which of the following statements about the Harmonized System of Nomenclature (HSN) is/are correct?

- A) The HSN is used for classifying goods in international trade.
- B) HSN codes are 8-digit codes.
- C) The first two digits of the HSN code represent the chapter.

D) The HSN is primarily used for classifying goods for transportation purposes.

Select the correct answer using the codes below:

- 1. A only
- 2. A and C only
- 3. A, C, and D only
- 4. All of the above

Q5. Which of the following statements about wheat blast is true?

- A) It is caused by a bacterium.
- B) It can cause yield losses of up to 100%.
- C) It was first identified in South Asia.
- D) Warm, humid weather contributes to its spread.

Select the correct answer using the codes below:

- 1. A and B only
- 2. B and C only
- 3. C and D only
- 4. B and D only

Q6. Which of the following statements about a Vote-on-Account in India is correct?

- A) It allows the government to change tax rates for the upcoming financial year.
- B) It lasts for a minimum of four months and can be extended further if needed.
- C) It covers all types of government expenditures, including non-essential ones.
- D) It is approved by the Lower House to grant funds for essential expenditures until the formation of a new government.

ANSWERS: 2) B, 3) C, 4) 2, 5) 4, 6) D

4. DEFENSE & SECURITY

4.1 CBI

Context

- The CBI is facing a shortage of 23% manpower, said the Department of Personnel and Training (DoPT) in their 2022-23 annual report.

Status of the Central Bureau of Investigation (CBI) as per the 2022-23 Annual Report

Manpower Shortage:

- The Central Bureau of Investigation (CBI) is facing a shortage of 23% manpower, including key positions like Special Director, Joint Directors, and DIGs.
- According to the Department of Personnel and Training (DoPT) in their 2022-23 annual report, as of December 31, 2022, **the total sanctioned strength of CBI was 7,295.**
- However, only 5,600 officers were in position, leaving 1,695 posts vacant.

Vacancies Over Time:

- In comparison, as of December 31, 2020, the total sanctioned strength was 7,273, with 1,374 posts vacant.
- By 2021, the number of vacancies had increased to 1,533.

Distribution of Vacancies:

- Vacancies exist across various ranks including one Special/Additional Director, two Joint Directors, 11 DIGs, 9 SSPs, one Additional SP, and others.
- The vacancies are also present among technical officers and constables.

Recruitment and Deputation:

- CBI strength includes both directly recruited personnel and state police personnel on deputation.
- Higher posts are occupied entirely by officers on deputation.
- In 2022, a total of 308 officers were inducted on deputation, and the deputation tenure of 133 officials was extended.

Case Status:

- As of the report, 943 registered cases and 82 preliminary enquiries were pending.
- Among the registered cases, 447 were pending under investigation for over a year.
- Of the pending enquiries, 60 were pending for over three months.
- Additionally, 23 Lokpal references were pending.

Court Cases and Conviction Rate:

- In 2022, courts delivered judgments in 557 court cases of CBI.
- Out of these, 364 cases resulted in conviction, with a conviction rate of 74.59%.
- Around 10,732 court cases were pending under trial in various courts.

Plans for Personnel:

- The CBI has plans for improving the office-cum-residential environment.
- Various construction projects are underway as part of the scheme 'Comprehensive Modernisation and purchase of land and construction of office/residence buildings for CBI.'
- Funds of Rs 39.06 crore were allocated in the revised estimates for 2022-23 for these projects.

Aspect & Description

Establishment

- Established in **1941** as the Special Police Establishment, later renamed the Central Bureau of Investigation (CBI). It was originally set up in 1965 to investigate governmental corruption.

Nature of Body

- The Central Bureau of Investigation is **not a statutory or constitutional body** but derives its roots from the Delhi Special Police Establishment Act, 1946.

Jurisdiction

- Investigates cases related to corruption, economic offenses, special crimes, and cases of national importance. **Can investigate across states without permission.**

Leadership

- Headed by a Director, assisted by a Special Director.
- Specialized units led by Joint Directors and DIGs.

Department Head appointment

- The union government shall appoint the Director based on the recommendation report given by a three-member committee (Prime minister, leader of the opposition party in Lok Sabha, and CJI of India).

Recruitment

- Recruitment through UPSC for Group A posts and SSC for Group B and C posts.
- Also takes personnel on deputation from state police forces.

Structure

- Divided into investigative units, legal and prosecution wing, support staff, and specialized units like the Economic Offences Wing (EOW) and Anti-Corruption Division.

Investigative Process

- Conducts investigations based on FIRs, complaints, or references from courts and government bodies.
- Employs various techniques including surveillance, interrogation, and forensic analysis.

RTI Provision

- CBI is **exempted from the provisions of the Right to Information Act.**

Notable Functions

- Conducts investigations independently, often involving high-profile cases.
- Provides support to other law enforcement agencies in complex cases.
- Represents the prosecution in court proceedings.

Other Important Facts

- It works under the **superintendence of the Central Vigilance Commission.**
- It investigates serious crimes committed by high-level criminals affecting national and international cooperation or national peace.
- CBI may also take up a case at the State government's request if the matter relates to public importance.
- It takes up cases on the direction of High Courts and Supreme Court as well. But in case of direction by the court, consent of the concerned state is not required.

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RECORDED DISCUSSION CLASSES

* T&C APPLIED

- The CBI in India acts as an agency or National Central Bureau of the Interpol (an international organization that helps police forces of different states to investigate and solve crimes).
- But before conducting any investigation or inquiry, the CBI is supposed to take prior permission of the Central government if the offense is committed by the joint secretary or any person of the above rank.

Criticism and challenges faced by CBI

“Caged Parrot” Allegation:

- In 2013, the Supreme Court labeled the CBI a “caged parrot” **due to alleged government influence**, particularly in the coal blocks allocation case. This criticism highlighted concerns about the agency's independence and integrity.

Structural Restrictions:

- The CBI's jurisdiction is **limited by the need for consent from state governments**, leading to gradual subordination to the federal government. This structural constraint undermines the agency's autonomy and impartiality.

Political Misuse:

- Political parties, especially the opposition, **accuse the ruling party of unfairly targeting opponents using the CBI for political gains**. This cycle of accusations erodes public trust in the agency's neutrality.

Delay in Investigations:

- A significant backlog of cases, including **over 1,000 pending cases**, has raised concerns about delayed justice.
- Parliamentary committees have emphasized that delayed investigations compromise the effectiveness of the agency.

Lack of Accountability:

- The CBI operates **outside the purview of the Right to Information Act, 2005**, limiting its accountability to the public.
- This **lack of transparency** raises questions about the agency's adherence to ethical standards.

Infrastructure Deficit:

- **Insufficient budget allocations** have resulted in an infrastructure deficit, hindering the agency's ability to invest in training, research, and equipment. This deficit adversely affects the quality and efficiency of investigations.

Massive Shortage of Personnel:

- The CBI faces a significant shortage of personnel, with over 1,700 vacant posts against its sanctioned strength.
- This **shortage impacts the agency's capacity to handle its workload effectively** and may compromise investigation quality.

Withdrawal of General Consent:

- The requirement for state government consent before initiating investigations has become a political tool, restricting the CBI's investigative powers. Withdrawal of general consent **undermines the agency's autonomy and effectiveness**.

Restricted Power:

- The need for government permission to investigate corruption charges against public servants limits the CBI's ability to combat corruption effectively, especially at higher levels of public service.

Charter not Protected by Legislation:

- The lack of legislative protection for the CBI's duties leaves its functions vulnerable to changes in government policy. This undermines the agency's institutional stability and independence.

Controversies and Partiality:

- **Allegations of inefficiency and partiality have tarnished the agency's reputation**, particularly in cases involving high-ranking officials or politicians. This raises doubts about the agency's credibility and impartiality.

Allegations against Officials:

- Former CBI officials, including directors, have faced **allegations of corruption and misconduct**, further eroding public trust in the agency's integrity and professionalism.

Cases of Mismanagement:

- Cases such as the Bansal family suicide and the Sohrabuddin case have highlighted concerns about the CBI's handling of

investigations and its treatment of the individuals involved. These incidents underscore the need for reform and accountability within the agency.

Suggestions to Reform the CBI

Under the Purview of CVC:

- The Supreme Court suggested placing the CBI under the supervision of the Central Vigilance Commission (CVC), enhancing oversight and accountability.

High-Level Governing Body:

- Establish a high-level governing board for the CBI, comprising the Prime Minister, Union Home Minister, and rotating Chief Ministers. This body would provide guidance and oversight, fostering confidence and consensus among states.

Structural Change:

- Bifurcate the CBI into an anti-corruption body and a National Crime Bureau to handle criminal offenses with national and international ramifications. This restructuring aims to optimize focus and efficiency.

Under the Purview of RTI:

- **Bring the CBI fully under the Right to Information (RTI) law**, ensuring transparency and accountability. Information on closed or withdrawn cases should be accessible to the public for social audit.

Parliamentary Committee Recommendation:

- Reduce dependence on deputation and prioritize permanent staff recruitment, especially up to the rank of Deputy Superintendent of Police, as recommended by parliamentary committees.

Annual Social Audit:

- Conduct an annual social audit of the CBI's operations by knowledgeable individuals in law, justice, and public affairs. The audit report should be presented before Parliament to ensure accountability.

Personnel Selection:

- Form a committee chaired by the Prime Minister to select the CBI director, comprising the Home Minister, Lok Sabha Speaker, Rajya

Sabha Chairman, and opposition leaders from both houses.

No Plum Posting After Retirement:

- **Prohibit the CBI director from accepting appointments by the Central and state governments post-retirement** to maintain impartiality and integrity.

2nd Administrative Reforms Commission (ARC) Report:

- Enact a new CBI Act to ensure autonomy, delineate jurisdiction, specify legal powers, and hold government interference accountable.

Own Dedicated Cadre:

- Develop a dedicated cadre of officers within the CBI to minimize disruption from deputation and ensure continuity and expertise.

Sufficient Staff:

- Monitor and address vacancies regularly, particularly up to the rank of inspector and deputy superintendent of police, to ensure adequate staffing and operational efficiency.

Granting Autonomy Like CAG:

- Consider granting the CBI autonomy akin to the Comptroller and Auditor General (CAG), ensuring independence and accountability directly to Parliament.

Parliamentary Oversight:

- Strengthen parliamentary oversight to enhance accountability, mitigating concerns of political misuse of authority.

Centrality of Lokpal:

- Place CBI services at the disposal of the Lokpal for investigations, ensuring independent scrutiny and supervision, akin to Supreme Court oversight in contentious cases.

Annual Report in Public Domain:

- Publish the CBI's annual report in the public domain, including case details, investigation progress, and outcomes, to promote transparency and public awareness.

Case Management System:

- Implement a centralized case management system accessible to the public, enabling

tracking of case progress and enhancing

accountability and efficiency.

4.2 EXERCISE VAYU SHAKTI-24

Context

- The Indian Air Force will conduct Exercise Vayu Shakti-24 at the Pokhran Air to Ground Range, near Jaisalmer.
- The last edition of Exercise Vayu Shakti was held on 16 February 2019.

Scope and Objectives

- Exercise Vayu Shakti will demonstrate the offensive and defensive capabilities of the IAF, encompassing day and night operations.
- The exercise will also showcase joint operations with the Indian Army.

Participant Aircraft

- A total of 121 aircraft will participate, including indigenous and foreign-made aircraft.
- Indigenous aircraft: **Tejas, Prachand, and Dhruv.**
- Foreign-made aircraft: Rafale, Mirage-2000, Sukhoi-30 MKI, Jaguar, Hawk, C-130J, Chinook, Apache, and Mi-17.

Weapon Systems

- **Indigenous Surface to Air Weapon systems Akash and Samar** will demonstrate their capability to track and shoot down intruding aircraft.

Capabilities Displayed

- The exercise will showcase the IAF's capability to deliver weapons with long-range precision and accuracy, as well as conventional weaponry, effectively and timely.
- Operations will be conducted from multiple air bases to demonstrate versatility and operational readiness.

Special Operations

- Special operations by the IAF transport and helicopter fleets, **involving the Garuds and Indian Army elements, will also be showcased.**

TEJAS

Overview:

Tejas is an indigenous multi-role light fighter aircraft developed by the Aeronautical Development Agency (ADA) and manufactured by Hindustan Aeronautics Limited (HAL). It is designed to meet the requirements of the Indian Air Force (IAF) as a replacement for aging MiG-21 aircraft.

Specifications:

- Role: Multi-role light fighter aircraft
- Maximum Takeoff Weight: 13,500 kg
- Speed: Mach 1.6
- Armament: Integrated with a variety of air-to-air, air-to-ground, and anti-ship missiles, as well as bombs and rockets.

Features:

- The aircraft is equipped with composite materials to reduce radar cross-section and enhance stealth capabilities.

PRACHAND

Overview:

Prachand is an indigenous air-launched version of the BrahMos supersonic cruise missile developed jointly by India and Russia. It is designed to be integrated into various aircraft of the Indian Air Force for precision strike capabilities.

Specifications:

- Role: Air-launched supersonic cruise missile
- Speed: Mach 2.8 to 3.0
- Range: 300 to 400 km
- Warhead: Conventional warhead with high explosive payload

Features:

- Prachand is a derivative of the land and ship-launched BrahMos missile, modified for aerial deployment. It retains the high speed, precision strike capabilities, and versatility of the BrahMos system.

DHRUV

Overview:

Dhruv is an indigenous multi-role helicopter developed by Hindustan Aeronautics Limited (HAL). It is designed for various roles, including utility transport, reconnaissance, search and rescue, and anti-submarine warfare.

Specifications:

- Role: Multi-role helicopter
- Maximum Takeoff Weight: 5,500 kg
- Speed: 265 km/h
- Range: 827 km
- Armament: Equipped with machine guns, rockets, and anti-tank guided missiles.

Features:

- The helicopter has a high payload capacity and can operate in various environments, including high altitudes and hot climates.

GARUD SPECIAL FORCES

Overview:

Garud is the Special Forces unit of the Indian Air Force (IAF), established to conduct special operations, counter-terrorism missions, and protect critical Air Force installations. The Garud Commando Force was established in September 2004, following the experiences gained from the Kargil War and the need for a specialized force within the IAF.

Training:

Garud commandos undergo rigorous training, including physical fitness, combat skills, marksmanship, parachute jumps, close-quarters battle (CQB), counter-terrorism tactics, and survival skills. They often train alongside other special forces units, both domestically and internationally.

AKASH SURFACE-TO-AIR MISSILE SYSTEM

Overview:

Developed by DRDO, Akash is a versatile medium-range air defense system designed to intercept aircraft, helicopters, drones, and cruise missiles.

Specifications:

- Role: Medium-range surface-to-air missile system
- Range: 25-30 km
- Altitude Coverage: Up to 18 km
- Speed: Supersonic
- Guidance: Active radar homing
- Warhead: High-explosive fragmentation

Features:

- Modular design for easy integration and deployment
- Capable of tracking and engaging multiple targets simultaneously
- Quick reaction time and high mobility for rapid response
- Operates effectively in all weather conditions
- Mounted on mobile platforms for flexibility in deployment

SAMAR SURFACE-TO-AIR MISSILE SYSTEM

Overview:

Samar is an indigenous long-range surface-to-air missile system developed by DRDO.

Specifications:

- Range: 70-100 km
- Altitude: Up to 30 km
- Speed: Supersonic
- Guidance: Active radar homing
- Warhead: High-explosive fragmentation

Features:

- Targets aircraft, helicopters, drones, and cruise missiles.
- Advanced radar systems for detection and guidance.
- Modular design for integration with various platforms.
- All-weather operation capability.

4.3 LEFT-WING EXTREMISM

In News: Union Home Minister's Statements

- Shri Amit Shah stated that the government has adopted an offensive strategy to curb terrorism.
- He mentioned that left-wing extremism (LWE) is breathing its last due to a hammer blow.

Naxalism or Maoism

- LWE, also known as Naxalism or Maoism, refers to the communist insurgency movements in India led by various Maoist groups.

Genesis:

- The Left Wing Extremism (LWE) or Naxal insurgency in India originated in a 1967 uprising in Naxalbari, West Bengal by the Communist Party of India (Marxist).

- They are the group of people who believe in the political theory derived from the teachings of the Chinese political leader Mao Zedong.
- The Naxals strongly believe that the solution to social and economic discrimination is to overthrow the existing political system.

Affected Regions:

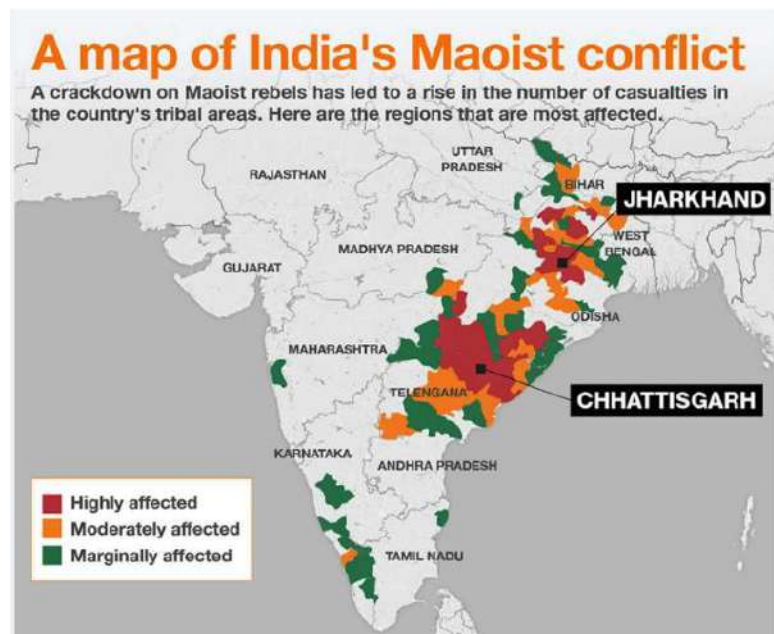
- LWE is primarily concentrated in central and eastern India, particularly in states like Chhattisgarh, Jharkhand, Odisha, and parts of Andhra Pradesh, Telangana, Bihar, and Maharashtra.

Activities:

- LWE groups engage in guerrilla warfare against security forces, target government infrastructure, and extort money from businesses and individuals.

Causes:

- LWE is fueled by issues such as land rights, economic inequality, exploitation of tribal communities, and government neglect of development in rural areas.



Responsible Factors for Left-Wing Extremism (LWE): The 2006 D. Bandopadhyay Committee Findings

- **Socio-Economic Disparities:** Identified as a major factor, with lack of access to basic amenities and employment opportunities in tribal areas.
- **Land Alienation:** Highlighted as a significant issue, with tribal communities losing land without adequate compensation.
- **Exploitation by Moneylenders:** Tribals often fall into debt traps, exacerbating their poverty and alienation.
- **Forest Rights:** Lack of recognition of traditional forest rights leading to conflicts over land and resources.
- **Poor Governance:** Inefficiency, corruption, and lack of basic services contributing to tribal alienation.
- **Lack of Development:** Inadequate infrastructure hindering economic growth and social progress.

- **Political Marginalization:** Limited representation and voice in decision-making processes.
- **Security Forces' Actions:** Instances of human rights violations and heavy-handedness exacerbating grievances.
- **Role of NGOs and Civil Society:** Some groups mobilizing tribals and highlighting their grievances, sometimes leading to radicalization.
- **External Support:** Role of external funding and training in sustaining LWE groups, necessitating international cooperation.

Status of LWE in India

Data from the Ministry of Home Affairs

- **LWE-related violence declined by 52%**, and deaths reduced by 69% from 2004-14 to 2014-23.
- Incidents of leftist extremism reduced from 14,862 to 7,128.
- Security forces' deaths decreased by 72%, and civilian deaths decreased by 68%.

- The number of districts with violence declined by 53% from 96 in 2010 to 45 in 2022.
- Police stations reporting violence decreased from 465 in 2010 to 176 in 2022.

Government Initiatives to Curb Left-Wing Extremism (LWE)

National Policy and Action Plan to Address Left Wing Extremism 2015:

- Comprehensive approach involving governance, security, and development.
- Aims to enhance security forces' capabilities and contain LWE spread.
- Safeguards rights of local communities, reducing grievances.
- Focuses on socio-economic development in affected regions to address root causes.

Juvenile Justice (Care and Protection of Children) Act, 2015:

- Protects children affected by LWE, especially those in distress.
- Covers Children in Conflict with Law (CCL) and Children in Need of Care and Protection (CNCP).
- Criminalizes recruitment or use of children by non-state militant groups.

SAMADHAN:

- One-stop solution for LWE problem.
- Includes Smart Leadership, Aggressive Strategy, Motivation and Training, Actionable Intelligence, Dashboard Based KPIs and KRAs, Harnessing Technology, Action plan for each Theatre, No access to Financing.

Security Operations:

- Use of specialized forces like the CRPF's CoBRA (Commando Battalion for Resolute Action) units for jungle warfare and anti-Naxal operations.

Development Initiatives:

- Implementation of development schemes in LWE-affected areas to address socio-economic grievances, such as the Pradhan Mantri Gram Sadak Yojana (PMGSY) for road connectivity, and the Integrated Action Plan (IAP) for overall development.

Legal Measures:

- Enactment of laws like the Unlawful Activities (Prevention) Act (UAPA) to tackle terrorist activities, including those of LWE groups.
- Amendments to the Chhattisgarh Special Public Security Act, 2005, to strengthen legal provisions against LWE.

Financial Measures:

- Freezing of bank accounts and assets of LWE groups and their sympathizers to choke their funding sources.
- Crackdown on illegal activities like extortion and smuggling, which fund LWE operations.

Way Forward to address Left-Wing Extremism (LWE) or Naxalism

- **Integrated Approach:** Combine security operations with development initiatives to address root causes effectively.
- **Enhanced Security Measures:** Improve intelligence gathering, coordination among forces, and use of technology for better results.
- **Socio-Economic Development:** Focus on infrastructure, healthcare, education, and livelihoods in affected areas to reduce grievances.
- **Community Participation:** Involve locals in decision-making, promote community policing, and build trust with security forces.
- **Legal Reforms:** Strengthen laws related to LWE, ensuring they respect human rights and enable effective prosecution.
- **Capacity Building:** Train security forces, administration, and civil society to tackle LWE challenges efficiently.
- **International Collaboration:** Work with neighboring countries to curb cross-border movement of LWE groups.
- **Counter-Narratives:** Promote peace, non-violence, and democracy through education and media to counter extremist ideologies.
- **Rehabilitation Programs:** Offer education, skill development, and psychological support for surrendered LWE members.

- **Monitoring and Evaluation:** Establish policies, and adapt strategies as needed. mechanisms to monitor progress, evaluate

Case Studies on Combating Left-Wing Extremism (LWE)

- **Andhra Pradesh and Telangana Development Initiatives:** The successful execution of development projects in these regions significantly diminished Maoist influence, highlighting the pivotal role of prioritizing developmental efforts.
- **Panchayati Raj System in West Bengal:** The decentralization of power through local governance structures led to a notable reduction in Naxalism, showcasing the effectiveness of empowering grassroots-level authorities.
- **Greyhounds Force in Andhra Pradesh:** This specialized task force effectively countered LWE due to its advanced training and deep understanding of local dynamics, indicating the importance of enhancing security forces' competencies.
- **Peace Talks with Naga Insurgents:** Constructive dialogues with Naga rebel groups resulted in a ceasefire and reduced violence, demonstrating the value of engaging in meaningful discussions with LWE factions.
- **Janmabhoomi Program in Andhra Pradesh:** Active participation of communities in decision-making and developmental initiatives significantly diminished Maoist influence, highlighting the significance of community engagement.
- **National Human Rights Commission's Interventions:** Upholding transparency and accountability to prevent corruption and human rights violations is essential in restoring public faith in government institutions, as demonstrated by the NHRC's actions in addressing alleged abuses by security forces.

4.4 SHORT ARTICLES

Personally Identifiable Information (PII)

In News

- Ministry of Corporate Affairs fixed critical vulnerability in its online portal after cybersecurity researcher reported it to CERT-In.
- Vulnerability exposed personal details of over 98 lakh directors of Indian companies, including Aadhaar, PAN, voter identity, passport, date of birth, contact number, and communication address.
- Personal data of top industrialists, celebrities, and sports personalities also exposed.

Understanding Personally Identifiable Information (PII):

- PII includes data that can identify a specific individual, such as Aadhaar, PAN, voter identity, passport, date of birth, contact

number, communication address, and biometric information.

- Non-sensitive PII, alongside additional information, can be used to accurately identify individuals.

Sensitive vs. Non-Sensitive PII:

- **Non-sensitive PII:** Publicly available information like zip code, race, gender, and religion.
- **Sensitive PII:** Can cause harm if exposed, stored by employers, government organizations, banks, and digital accounts.

Risks of PII Exposure:

- Cyberattacks can lead to PII exposure, facilitating targeted attacks, fraud, and identity theft.
- Threat actors sell exposed PII on the dark web, leading to further exploitation.

Incidents of PII Breach in India:

- Reports of CoWIN portal data breach, RailYatri platform breach, and surge in cyberattacks on Indian businesses.
- Allegations denied by the government, with investigations leading to arrests.

Protecting PII:

- Ensure websites use HTTPS protocol for secure connections.
- Use VPNs on public networks to safeguard online activities.
- Avoid sharing personal information on social media.
- Monitor bank accounts, credit cards, and credit scores for signs of misuse.
- Be cautious of phishing attacks and delete identity documents securely.

Conclusion:

- Securing Personally Identifiable Information (PII) is crucial in safeguarding individuals from cyber threats and identity theft. Implementing robust security measures and exercising caution can mitigate the risks associated with PII exposure.

Task Force Report on Suicides in Forces

Context

- According to a task force report commissioned by the Union Ministry of Home Affairs (MHA), suicides and fratricides in the Central Armed Police Forces (CAPFs) have shown an upward trend.

Details

- The report, which analyzed 642 suicide cases and 51 fratricidal deaths over five years, highlighted the gravity of the situation.

Factors Contributing to Suicides:

- The task force identified three major factors contributing to suicides in security forces: **working conditions, service conditions, and personal/individual issues.**
- Working conditions, such as prolonged deployment in high-risk areas and tough duty hours, pose significant challenges.

- Service condition issues, including **trauma, abuse, and bullying, further compound the problem.**
- Additionally, personal issues, such as **family-related stressors, contribute to the mental health burden** faced by security personnel.

Mental Health Taboos:

- One of the most concerning findings of the report was the taboo surrounding mental health in security forces.
- Personnel often **hesitate to seek help or share their problems due to fear of being mocked or taunted as weak.** This stigma has hindered efforts to address mental health issues effectively.

Recommendations for Intervention:

- To address the mental health challenges faced by security personnel, the task force recommended several interventions.
- These include mental **health screening for all personnel returning from leave or long-term duties, sensitization programs for senior officers to treat juniors with dignity, and creating a supportive environment** where personnel feel comfortable sharing their problems.

Addressing the Root Causes:

- While immediate interventions are crucial, addressing the root causes of mental health issues in security forces is paramount. This includes **improving working conditions, providing adequate support systems, and fostering a culture of mental health awareness and support.**

Conclusion:

- Suicides in security forces represent a complex issue that requires a multifaceted approach. By addressing the underlying factors contributing to mental health challenges and promoting a culture of openness and support, we can work towards preventing these tragic incidents and ensuring the well-being of our security personnel.

Digital Payment and Online Security Measures for Data Protection

Context

- The Ministry of Electronics and Information Technology informed about the cybersecurity situation to the parliamentary committee on communications and information technology.
- The Report was titled as: "Digital Payment and Online Security Measures for Data Protection".

Findings and Recommendations

Incidents of Website Hacking:

- Between January 2018 and September 2023, 373 central and state government websites were hacked.
- As tracked by CERT-In (Indian Computer Emergency Response Team), a total number of 110, 54, 59, 42, 50 and 58 website hacking incidents of Central Ministries/Departments and State Government organizations were observed during the years 2018, 2019, 2020, 2021, 2022 and 2023 (upto September), respectively.



Recommendations to Strengthen Cybersecurity:

- The parliamentary committee suggested strengthening the cybersecurity of government websites and critical digital infrastructure.
- The committee emphasized the importance of adhering to cybersecurity guidelines and recommended that the Ministry update the entire government infrastructure regarding cyber threats.

Use of Outdated Windows:

- The committee noted that some government offices were still using outdated Windows on their official computers and laptops.
- This practice makes them vulnerable to cyber threats.

Request for Updates on Cybersecurity Actions:

- The committee requested to be apprised of the actions taken by the Ministry to enhance the cybersecurity of government infrastructure.



CERT-IN (INDIAN COMPUTER EMERGENCY RESPONSE TEAM)

Establishment:

- Founded in 2004 under the Ministry of Electronics and Information Technology, Government of India.

Role:

- Cyber Security: Ensures cybersecurity and responds to cyber incidents.
- Incident Response: Provides incident response services to organizations and critical sectors.
- Information Sharing: Facilitates the sharing of cybersecurity information and best practices.
- Capacity Building: Conducts training programs and awareness campaigns.

Composition:

- Director General: Leads CERT-In.
- Team of Experts: Includes cybersecurity professionals and analysts.
- Collaboration: Works with government agencies, private sector, and international bodies.

Procurement for Armed Forces

Context

- DAC approved AoN for proposals worth ₹84,560 crore.

Defence Acquisition Council (DAC) Proposals

Acceptance of Necessity (AoN)

- Includes long-pending deals for heavy weight torpedoes (HWT) and flight refueller aircraft (FRA).

Major Deals

- Medium range maritime reconnaissance and multi-mission maritime aircraft for Navy and Coast Guard.
- New generation anti-tank mines, air defence tactical control radar, and software-defined radios.

Enhancing Naval Capabilities

- AoN for procurement of active towed array Sonar for Indian naval ships.
- AoN for HWT to enhance attacking capabilities of Kalvari class submarines.

Enhancing IAF's Operational Capabilities

- AoN for procurement of FRA to enhance operational capabilities and reach.

Delayed Deals

- Deals for HWTs, flight refueller aircraft, and towed array sonars repeatedly delayed.
- IAF looking to lease aircraft for training due to delays.

Medium Range Maritime Reconnaissance and Multi-Mission Maritime Aircraft

- AoN granted through Buy and Make category for Navy and Coast Guard surveillance and interception capabilities.
- Likely to be based on the Airbus C-295 transport aircraft.

Procurement of New Generation Anti-Tank Mines

- Approved under Buy (Indigenously Designed, Developed and Manufactured (IDDM)) category.
- Mines have seismic sensors and remote deactivation with additional safety features.

Canister Launched Anti-Armour Loiter Munition System

- AoN under Buy (Indian-IDDM) category for mechanised forces.
- Enhances operational efficiency and domination in tactical battle area.

Air Defence Tactical Control Radar

- AoN for strengthening air defence capabilities, especially for detecting slow, small, and low-flying targets.

Software Defined Radios

- AoN for procurement by Coast Guard for high-speed communication with secure networking capability.

Amendments in Defence Acquisition Procedure (DAP) 2020

- Amendments to promote procurement of advanced technologies from start-ups and MSMEs.
- Amendments in benchmarking, cost computation, payment schedule, and procurement quantity.

Sustainment Support for MH-60R Multi-Role Helicopters

- AoN cleared for follow on support and repair replenishment for 24 MH-60R helicopters procured by the Navy from the U.S.



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DAC (DEFENCE ACQUISITION COUNCIL)

History of DAC (Defence Acquisition Council)

- **Formation:** The DAC was established in 2001 following recommendations from the Group of Ministers after the Kargil War in 1999. These recommendations aimed at reforming the national security system, enhancing defense preparedness, and streamlining defense acquisitions.
- **Post-Kargil Reforms:** The formation of the DAC was part of the post-Kargil reforms to revamp and strengthen India's defense apparatus, particularly in the context of defense acquisitions and decision-making processes.

Role and Functions:

- **Decision-Making Body:** Holds the highest authority in the Ministry of Defence for approving and guiding the acquisition of new defense equipment, technologies, and systems for the armed forces.
- **Capital Acquisitions:** Responsible for approving procurement proposals, including defense platforms, weapons, technology upgrades, and major defense systems.
- **Policy Formulation:** Involved in formulating defense acquisition policies, strategies, and frameworks to enhance India's defense capabilities and modernize its armed forces.

Composition:

- **Chairmanship:** Minister of Defence chairs the council, leading discussions, deliberations, and decision-making processes.
- **Membership:** Comprises senior officials from the Ministry of Defence, Armed Forces, and other stakeholders involved in defense acquisition and policymaking.

Brahmos Extended Range (ER) Supersonic Cruise Missiles

Context

- The Cabinet Committee on Security (CCS) has approved the acquisition of over 200 BrahMos Extended Range (ER) supersonic cruise missiles for Indian Navy warships.

BrahMos Missile Specifics

- The BrahMos is a nuclear-capable supersonic cruise missile designed and built collaboratively between India and Russia.
- **Capable of travelling at speeds of up to Mach 3**, it is one of the world's fastest cruise missiles.
- The BrahMos possesses the **capacity to carry a warhead weighing 300 kilograms**, encompassing both conventional and nuclear payloads.
- The missile is the sole system inside the Indian arsenal that **possesses the capability to be deployed from several platforms including air, sea, and land**.
- In addition, the cruise missile exhibits a range of trajectories, such as high, high-low, low, and surface-skim, in contrast to ballistic missiles, which are propelled for only half of their journey and follow a pre-defined parabolic trajectory.
- A BrahMos missile's trajectory cannot be predicted so easily, which makes it difficult to counter missile defenses.

BrahMos Extended Range (ER) supersonic cruise missiles

- The ER missile has a range between **400-500 kilometers, with the ability to strike targets both at sea and on land**.
- The new capability would allow the IAF to strike targets from standoff ranges and from outside the perimeters of enemy air defenses.

International Criminal Police Organization - Interpol









Context

- Concerns have been raised about the misuse of Interpol's notice system.

About INTERPOL

- The International Criminal Police Organization - INTERPOL, with Headquarters in Lyon (France), is the world's largest international police organization, with 190 member countries, each represented by a National Central Bureau.
- Created in 1923, INTERPOL facilitates international police co-operation via its global police communication system, databases, training and specific assistance in cross-border operations.
- Each member country maintains a **National Central Bureau (NCB)** that serves as the liaison between the country's law enforcement agencies and Interpol's General Secretariat.
- Pursuant to INTERPOL's Constitution, action is taken within the limits of the laws existing in different countries and in the spirit of the Universal Declaration of Human Rights.


TYPES OF INTERPOL NOTICES

 <p>RED NOTICE: To seek the location and arrest of wanted persons with a view to extradition or similar lawful action.</p>	 <p>YELLOW NOTICE: To help locate missing persons, often minors, or to help identify persons who are unable to identify themselves.</p>
 <p>BLUE NOTICE: To collect additional information about a person's identity, location or activities in relation to a crime.</p>	 <p>BLACK NOTICE: To seek information on unidentified bodies.</p>
 <p>GREEN NOTICE: To provide warnings and intelligence about persons who have committed criminal offences and are likely to repeat these crimes in other countries.</p>	 <p>ORANGE NOTICE: To warn of an event, a person, an object or a process representing a serious and imminent threat to public safety.</p>
 <p>INTERPOL-UN SECURITY COUNCIL SPECIAL NOTICE: Issued for groups and individuals who are the targets of UN Security Council sanctions committees.</p>	 <p>PURPLE NOTICE: To seek or provide information on modus operandi, objects, devices and concealment methods used by criminals.</p>

Source: www.interpol.int NATION GRAPHICS

action is taken within the limits of the laws existing in different countries and in the spirit of the Universal Declaration of Human Rights.

4.5 SNIPPETS



5th Edition of Exercise Dharma Guardian

APTI PLUS

- Nature of Exercise: 'DHARMA GUARDIAN' is an annual exercise conducted alternatively in India and Japan. The current edition is being held in India.
- Objective: The exercise aims to foster military cooperation and enhance combined capabilities to execute joint operations in a semi-urban environment under Chapter VII of the United Nations Charter.
- 2024 Edition
- Focus Areas: High physical fitness, Joint planning, Tactical drills, Basic special arms skills.
- Tactical Drills: Establishing a temporary operating base, Creating an ISR grid, Setting up mobile vehicle checkpoints, Conducting cordon and search operations, Heliborne operations, House intervention drills.
- A weapon and equipment display will also be organized showcasing the 'Atmanirbhar Bharat' initiative and the growing defence industrial capability of the country.



16th Edition of Exercise Dosti

APTI PLUS

- Initiation: Started in 1991 as a bilateral exercise between the coast guards of India and the Maldives.
- Expansion: Sri Lanka joined the exercise in 2012, enhancing its scope and regional cooperation.
- Current Participation: In addition to India, the Maldives, and Sri Lanka, Bangladesh is participating as an observer in the ongoing exercise. It is a biennial exercise.
- Objective: Enhancing maritime cooperation and strengthening ties with Sri Lanka.
- India's Presence: Indian Coast Guard ships ICGS Samarth and ICGS Abhinav, along with an ICG Dornier aircraft, have arrived in the Maldives for the exercise.
- The 'Dosti' drill, evolving from a bilateral to a trilateral exercise, reflects the growing cooperation among regional maritime security agencies.



MILAN Exercise

- A multilateral naval exercise hosted by the Indian Navy.
- Biennial congregation of navies conducted by the Indian Navy since 1995.
- Originally conducted at the Andaman and Nicobar Islands.
- Later biennially on the mainland, with the 2024 event held in Visakhapatnam.
- Delegations from nearly 50 countries across Asia, Africa, Europe, Oceania, North and South America.
- Historically the largest MILAN exercise in terms of participation.
- 15 foreign naval ships and maritime patrol aircraft participated in sea drills.
- Foster camaraderie, cohesion, and collaboration among participating navies.
- Enhance maritime security.
- Provide a platform for professional and social interaction.
- Operational demonstrations and weapon firings.
- Anti-submarine warfare drills.
- Cultural exchanges and professional expertise sharing.
- Social events for participants.
- Reflects India's growing importance in the Indo-Pacific region.
- Exemplifies collective effort towards secure maritime boundaries.
- Strengthens ties among participating nations.
- Rooted in the concept of 'SAGAR'—Security and Growth for All in the Region.
- Aligns with India's broader geopolitical vision for maritime cooperation in the Indo-Pacific.

4.6 1 MAINS & 4 MCQs

Q1. Discuss the issue of suicides in Indian armed forces and paramilitary forces. What are the underlying causes and the measures taken to address this problem?

Introduction:

- Briefly mention the prevalence of suicides in the armed forces and paramilitary forces.
- Highlight the significance of mental health in such high-stress professions.

Causes:

- Stress and duty pressure.
- Personal and family issues.
- Lack of mental health support.
- PTSD.

Measures:

- Counseling and mental health services.
- Awareness programs and stress management.
- Welfare measures for personnel and families.
- Strengthening leadership and peer support.

Government Initiatives:

- Mention specific schemes or initiatives.
- Highlight any recent policy changes.

Conclusion:

- Summarize the importance of mental health support.
- Emphasize the need for continued efforts to reduce suicides.

Q2. Which of the following statements is/are correct regarding the Defence Acquisition Council (DAC)?

- A. DAC was established in 2001 after the Kargil War.
- B. It is responsible for formulating defense acquisition policies and strategies.

- C. The Minister of Defence chairs the DAC.
- D. DAC is primarily focused on operational planning for the armed forces.

Select the correct answer using the codes below:

1. A and B only
2. B and C only
3. A, B, and C only

4. All of the above

Q3. Which of the following statements about INTERPOL is/are correct?

- A. INTERPOL is headquartered in Lyon, France.
- B. It has 180 member countries.
- C. Each member country maintains a National Central Bureau.
- D. INTERPOL facilitates international police cooperation through its databases and training.

Options:

- A) A, B, and C only
- B) A, C, and D only
- C) A, B, C, and D
- D) B, C, and D only

Q4. Which of the following statements about the Central Bureau of Investigation (CBI) is correct?

- A) The CBI was established in 1965 under the Central Bureau of Investigation Act.
- B) The CBI is a statutory body with constitutional powers.
- C) The CBI conducts investigations only within the state where it is headquartered.
- D) The CBI is exempted from the provisions of the Right to Information Act.

Q5. Which of the following statements about the MQ-9B drone are true?

- 1. It is known for its silent operation and stealth capability.
- 2. It can fly up to 50,000 feet in altitude.
- 3. It has a top speed of 275 mph.
- 4. The drone has a payload capacity of 1,200 kg.

Choose the correct statements:

- A) 1, 2 and 3 only
- B) 1, 2 and 4 only
- C) 1, 3 and 4 only
- D) 2 and 3 only

ANSWERS: 2) 3, 3) B, 4) D, 5) A

5. ENVIRONMENT & ECOLOGY

5.1 THE WATER AMENDMENT BILL

Context

- The Central government has introduced the Water (Prevention and Control of Pollution) Amendment Bill, 2024 in Rajya Sabha.

Details

- The Centre on Monday introduced a Bill that would enable it to prescribe the norms for nominating chairpersons of State Pollution Control Boards, exempt certain industrial units from restrictions, and decriminalize "minor offenses" related to water pollution.

Water (Prevention and Control of Pollution) Amendment Bill, 2024

- The Water (Prevention and Control of Pollution) Act of 1974 was initially enacted to address water pollution issues by laying down provisions for prevention and control. However, the evolving legislative landscape recognizes the need for amendments to align with contemporary governance principles. The Water (Prevention and Control of Pollution) Amendment Bill, 2024, recently tabled in the Rajya Sabha, is a notable step in this direction.*

Potential Constitutional Implications

Decriminalization of Violations

- The bill removes imprisonment as a penalty for certain violations, replacing it with fines. While this aligns with the government's goal of "minimum government, maximum governance," some argue it may weaken enforcement and undermine the constitutional right to a clean environment.

State Autonomy

- The amendment being introduced under Article 252 might raise concerns about potential infringement on state autonomy in managing water resources, as water falls partially under the state list.

Objectives of the Amendment

Trust in Democratic Governance

- The Amendment underscores the importance of trust in democratic governance. It advocates for a system where the government places trust in its citizens and institutions.

Addressing Outdated Provisions

- The Bill acknowledges that outdated rules contribute to a trust deficit. For instance, the existing Act imposes imprisonment for up to three months for failing to inform the State Board about water abstraction. The Amendment proposes replacing this with a fine ranging from Rs10,000 to Rs15 lakh.

Rationalizing Criminal Provisions

- The Bill aims to rationalize criminal provisions, particularly for minor violations that do not cause harm to humans or the environment. It aligns with the principles of Ease of Living and Ease of Doing Business.

Major Features of the Amendment Bill

The Water (Prevention and Control of Pollution) Amendment Bill, 2024 introduces several significant changes:

Nomination of Chairman

- The manner of nominating the chairman of the State Pollution Control Board is to be prescribed by the Central Government.

Exemptions for Industrial Plants

- The Central Government may exempt specific categories of industrial plants from the application of Section 25, which relates to restrictions on new outlets and discharges.

Guidelines by Central Government

- The Central government is empowered to issue guidelines concerning the grant, refusal, or cancellation of consent by any State Board for the establishment of industries.

Decriminalization of Minor Offenses

- The Amendment proposes decriminalizing minor offenses and replacing imprisonment with monetary penalties for continued contravention.

Adjudication of Penalties

- The manner of adjudication of penalties will be overseen by an adjudicating officer not lower than the rank of Joint Secretary to the Government of India or Secretary to the State government.

Penalties for Non-Compliance

- Provisions include penalties for failure to comply with restrictions on new outlets, existing discharges of sewage or trade effluent, etc.

Utilization of Penalties

- The amount of penalties imposed will be credited to the Environmental Protection Fund established under the Environment (Protection) Act of 1986.

Potential Impact

Reduced compliance burden

- Aims to make regulations more industry-friendly and reduce compliance costs.

Faster dispute resolution

- Introduces a faster and more efficient dispute resolution mechanism.

Improved water quality

- Aims to achieve better water quality by strengthening regulations and enforcement.

Concerns about environmental protection

- Decriminalization and potential exemptions raise concerns about weakening environmental protection and enforcement.

State autonomy concerns

- Some argue the bill infringes on state autonomy in managing water resources.

Closing thoughts

- The **Water (Prevention and Control of Pollution) Amendment Bill, 2024**, was introduced in the Rajya Sabha by Minister of State for Environment, Shri Ashwini Kumar Choubey. The applicability of the Bill extends to Himachal Pradesh and Rajasthan, with a provision for other states to adopt it through a resolution under the original Act.

5.2 HUMAN-WILDLIFE CONFLICTS

Context

- The government is considering a proposal to increase the compensation for the next of the kin of the victims of human-wildlife conflicts.

Details

- Proposal to hike compensation for victims of man-animal conflict by 50% under consideration.
- The proposal to increase the compensation from ₹10 lakh to ₹15 lakh was under the active consideration of the government. At present, the relatives of the victims were given ₹10 lakh for the deceased and ₹2 lakh for snake bite deaths reported outside the forest.

Facts

- The World Wildlife Fund (WWF) estimates that around 5 billion people globally are affected by HWCs annually.
- A 2021 study published in *Nature Sustainability* reported that the global economic cost of HWCs is estimated to be between \$18.8 and \$44.2 billion per year.
- The International Union for Conservation of Nature (IUCN) Red List of Threatened Species highlights that over 30% of terrestrial mammals and 18% of birds are threatened by HWCs.

About Human-wildlife Conflicts

- The intricate relationship between humans and wildlife is increasingly strained by growing populations, habitat loss, and resource competition. This results in "human-wildlife conflict," a complex issue with far-reaching consequences for both humans and animals.

Understanding the Conflict

Root Causes:

- Habitat loss due to deforestation, urbanization, and agricultural expansion pushes wildlife into closer proximity to human settlements, leading to competition for resources like food and water.
- E.g. In Indonesia, orangutans raid oil palm plantations for food, causing economic losses for farmers and endangering the orangutans through retaliatory killings.

Impacts on Humans:

- Crop damage, livestock predation, and threats to human safety are direct consequences for communities living alongside wildlife.
- E.g. In Nepal, snow leopards kill thousands of livestock each year, causing significant economic hardship for herders.

Animal Welfare Concerns:

- Wildlife suffers from habitat loss, poaching, and retaliatory killings, leading to population decline and species endangerment.
- E.g. Tigers in Southeast Asia lose their hunting grounds due to deforestation, pushing them towards human settlements and increasing conflict.

Strategies for Coexistence

Habitat Conservation:

- Protecting and restoring natural habitats reduces conflict by providing wildlife with space and resources. E.g. Wildlife reserves in India provide safe havens for elephants and mitigate human-elephant conflict.

Wildlife Corridors:

- Creating corridors between fragmented habitats allows safe movement for animals, reducing human-wildlife encounters. E.g. In Thailand, wildlife corridors are being built to connect tiger populations and minimize human-tiger conflict.

Compensation Schemes:

- Reimbursing communities for wildlife-caused damage can alleviate financial burdens and foster tolerance.

Non-lethal Deterrents:

- Using noisemakers, fencing, and deterrents like chili-pepper spray can discourage wildlife from entering human settlements without harming them.

Community Engagement:

- Educating communities about the importance of wildlife and involving them in conservation efforts fosters a sense of ownership and responsibility. E.g. In Nepal, local communities participate in snow leopard conservation patrols, reducing conflict and protecting the species.



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Challenges and Considerations

Competing Interests:

- Balancing the needs of humans and wildlife requires careful consideration of social, economic, and environmental factors.

Funding and Resources:

- Implementing effective mitigation strategies requires significant financial resources and trained personnel, often posing challenges for developing nations.

Policy and Enforcement:

- Strong legal frameworks and effective enforcement are crucial for protecting wildlife and preventing illegal activities.

Transboundary Conflicts:

- Addressing conflicts involving migratory species requires international cooperation and coordinated efforts. **For example: A 2021 study in the Journal of Applied Ecology revealed that over 2,000 human-elephant conflicts were reported in India between 2014 and 2018, resulting in 500 human deaths and 300 elephant deaths.**

Case study

1. **In Nepal, a 2022 study documented 181 snow leopard attacks on livestock over five years.** Such conflicts threaten the livelihoods of herders and contribute to negative perceptions of snow leopards, hindering conservation efforts.
2. **A 2023 study in Conservation Biology reported that over 500 human-lion conflicts were recorded in Kenya between 2009 and 2018, resulting in 122 human deaths and 188 lion deaths.**

Mitigation Strategies

Habitat conservation and restoration:

- Protecting and restoring wildlife habitats can reduce resource competition and mitigate conflict.

Conflict deterrents:

- Electric fences, guard dogs, and chili pepper sprays can be used to deter wildlife from entering human settlements.

Community engagement and education:

- Educating communities about HWCs and involving them in finding solutions is crucial for long-term success.

Compensation schemes:

- Compensating communities for losses due to HWCs can build support for conservation efforts.

Research and monitoring:

- Understanding the drivers and patterns of HWCs is essential for developing effective mitigation strategies.

Indian Government Initiatives to Address Human-Wildlife Conflicts

National Tiger Conservation Authority (NTCA):

- Implements the "Guidelines for Mitigating Human-Tiger Conflict" and provides financial assistance to states for conflict mitigation measures.

Ministry of Environment, Forests & Climate Change (MoEFCC):

- Launched the "National Human-Wildlife Conflict Mitigation Strategy and Action Plan (HWC-NAP)" in 2022, providing a comprehensive framework for addressing HWCs across all species.

Project Hangul:

- Aims to conserve the Hangul (Kashmiri red deer) in Jammu and Kashmir by creating wildlife corridors and reducing habitat fragmentation.

Project Snow Leopard:

- Focuses on protecting snow leopards in the Himalayas through community-based conservation and conflict mitigation measures.

Rajiv Gandhi Wildlife Management Institute (R-GWMI):

- Develops and implements innovative solutions to address HWCs, like using drones for monitoring and early warning systems.

Conclusion

- Human-wildlife conflicts are complex challenges requiring multifaceted solutions.

By addressing the root causes, implementing effective mitigation strategies, and promoting collaborative approaches, we can minimize

the negative impacts on both humans and wildlife, working towards a more harmonious coexistence.

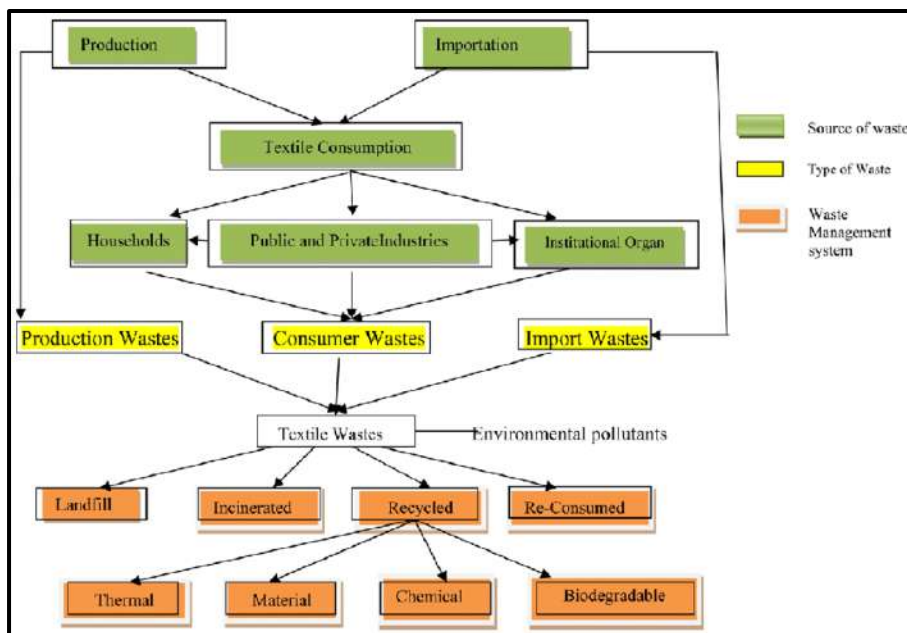
5.3 TEXTILE WASTE MANAGEMENT

Context

- As per the European Environment Agency (EEA) about half of the textile waste collected in Europe ends up in African second-hand markets.

Facts

- Textile Exchange (2023):** Global textile waste reached 92 million tons in 2020, with projections for 148 million tons by 2030.
- McKinsey & Company (2022):** Only 1% of all textiles are recycled into new clothing globally.
- Textiles Committee of India (2022):** India generates 18 million tons of textile waste annually, expected to reach 37 million tons by 2030.
- Ministry of Textiles, India (2023):** Announced a National Mission on Sustainable Textiles with a focus on waste reduction and recycling initiatives.



About Textile Waste

- The textile industry is a major contributor to global waste, accounting for around 8% of annual global waste. This equates to 92 million tonnes of textile waste generated annually, according to the Ellen MacArthur Foundation. This waste primarily includes:
 - Pre-consumer waste:** Fabric scraps, yarn ends, and other leftovers from garment production.
 - Post-consumer waste:** Discarded clothing, footwear, and other textile products.

Global Impact

Landfill and Incineration:

- 85% of textiles end up in landfills or incinerators, releasing harmful greenhouse gases (GHGs) and pollutants while occupying valuable space.

Microplastics:

- Synthetic textiles shed microplastics during washing, polluting water bodies and entering the food chain.

Water and Chemical Pollution:

- Textile production and dyeing consume vast amounts of water and chemicals, often leading to water pollution.

Environmental Impact

Landfills:

- Most textile waste ends up in landfills, where it decomposes slowly, releasing harmful methane gas and potentially leaching toxic chemicals into the soil and water.

Water pollution:

- Synthetic textiles, especially those containing microplastics, contribute to water pollution when they break down during washing and enter waterways.

Resource depletion:

- Producing new textiles requires significant resources like water, energy, and raw materials, which contributes to resource depletion.

Textile Recycling

Mechanical recycling:

- Shreds textile waste into fibers and spins them into new yarn for lower-quality textiles.

Chemical recycling:

- Breaks down textile waste into its chemical components and uses them to create new virgin-like fibers.

Down cycling:

- Repurposes textile waste into non-textile products like insulation or stuffing.

Why is Textile Recycling Important?

Conserves resources:

- Reduces reliance on virgin materials, saving water, energy, and land.

Reduces environmental impact:

- Lowers greenhouse gas emissions and water pollution.

Creates jobs:

- Fosters the growth of the recycling industry and promotes circular economy principles.

Indian Scenario

- India is the world's **second-largest textile producer**, generating over 17 million tonnes of textile waste annually.

- Rapidly growing fashion trends and increasing disposable incomes contribute to rising waste generation.
- Informal waste collection and sorting systems pose challenges in terms of efficiency, safety, and environmental impact.

Textile Waste Management in India

Government Initiatives:

- Extended Producer Responsibility (EPR) guidelines for textile manufacturers.
- National Mission on Sustainable Textiles.
- **The Textile Waste Management Rules, 2022** mandate collection, segregation, and recycling of textile waste.
- The **Sustainable Apparel Coalition (SAC)** promotes responsible production practices in the Indian garment industry.

Industry Efforts:

- **Brands like Aditya Birla Fashion and Reliance Industries** are launching sustainable clothing lines and recycling initiatives.
- **Startups like The Humble Co. and ReCollect** are creating innovative solutions for textile waste collection and recycling.

Recommendations

Strengthen EPR implementation:

- Ensure manufacturer accountability for end-of-life product management.

Invest in recycling infrastructure:

- Build sorting, separation, and processing facilities.

Promote consumer awareness and participation:

- Educate consumers about recycling options and encourage responsible disposal.

Develop innovative recycling technologies:

- Advance technologies for diverse textiles and enhance efficiency.

Conclusion

- Textile waste management is a complex issue demanding collective action from governments, industries, and consumers. By prioritizing sustainable practices, investing in recycling infrastructure, and promoting

awareness, India can transition towards a circular textile economy and mitigate the

environmental impact of textile waste.

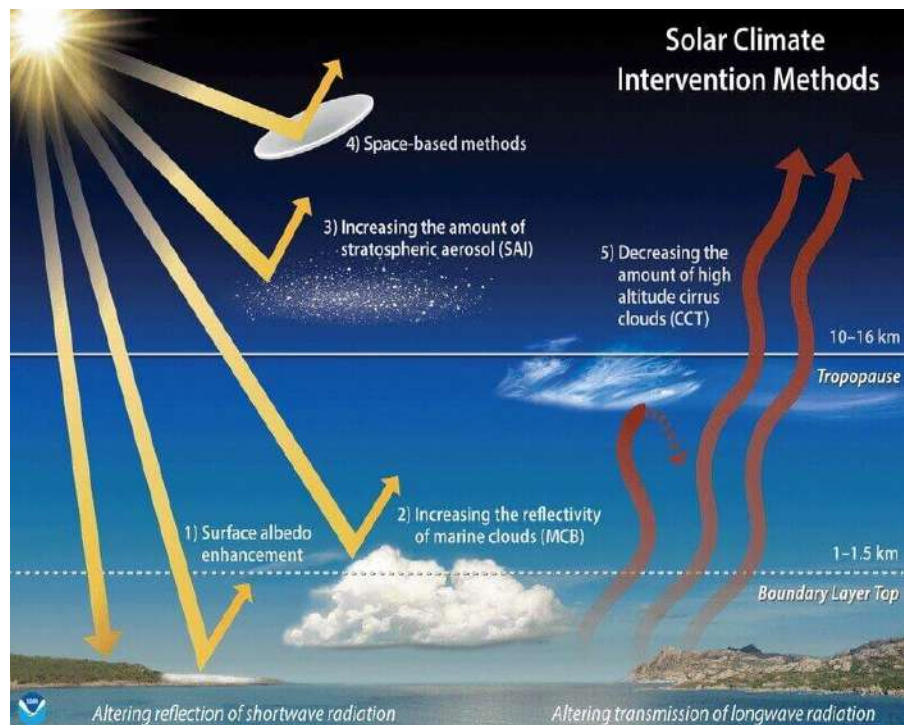
5.4 STRATOSPHERIC AEROSOL INTERVENTION

Context

- A recent study looked at the impact of stratospheric aerosol intervention (SAI) in mitigating global warming effects in West Asia (also known as Middle East) and North Africa (MENA).

Facts

- Research suggests SAI could be a relatively inexpensive climate change mitigation strategy. Estimates range **from \$10 billion to \$100 billion per year for deployment**, significantly lower than some other proposed solutions.
- Estimates suggest SAI could **potentially offset 1-2 degrees Celsius of global warming**, but this is a theoretical value based on modeling and depends on the specific implementation strategy.
- The **SCoPEX (Stratospheric Controlled Perturbation Experiment)** is a research project aiming to study the environmental effects of injecting a small amount of aerosols into the stratosphere. This multi-year project has received funding from various sources.



About Stratospheric Aerosol Intervention (SAI)

Stratospheric Aerosol Intervention (SAI), also known as Stratospheric Aerosol Injection, is a geo-engineering or climate engineering approach aimed at mitigating global warming by reflecting sunlight back into space.

- Mechanism:** The process involves the release of tiny reflective particles or aerosols into the stratosphere to mimic the cooling effects of volcanic eruptions. **Sulfur dioxide (SO₂) is often used as it forms sunlight-reflecting sulfate aerosols when injected into the stratosphere.**

- Inspiration from Mount Pinatubo:** The concept draws inspiration from natural events like the **1991 eruption of Mount Pinatubo in the Philippines**, which deposited significant amounts of particulate matter and sulfur dioxide into the atmosphere, resulting in a temporary cooling effect.
- Effectiveness:** The aerosol layer created by **SAI is reported to scatter radiation in the stratosphere**, reducing the amount absorbed by the troposphere, thereby potentially lowering global temperatures.
- Implementation Methods:** Various methods could be employed to create the **artificial**

aerosol layer, including shooting sulfur particles into the stratosphere with cannons or dispersing them from balloons or other aircraft.

Potential Benefits

- **Rapid Cooling:** SAI, if implemented effectively, could provide a relatively rapid cooling effect compared to other methods of addressing climate change.
- **Buying Time:** It could offer some temporary relief while we work on reducing greenhouse gas emissions, the root cause of global warming.
- **Potentially Cost-Effective:** Estimates suggest SAI might be a relatively inexpensive way to address climate change.

Challenges and Concerns

- **Uncertainties:** The long-term effects of large-scale aerosol injection into the stratosphere are not fully understood. Potential impacts on weather patterns, ozone layer depletion, and unintended consequences need thorough investigation.
- **International Cooperation:** Effective implementation of SAI would require extensive international cooperation and governance frameworks to ensure responsible and equitable application.
- **Moral Hazard:** Overreliance on SAI as a solution could potentially delay efforts to reduce greenhouse gas emissions, the primary solution to climate change.

- **Equity Considerations:** Potential regional variations in the effects of SAI require careful consideration to ensure a fair and equitable approach.

Stratosphere: Earth's Atmospheric Layer

- The stratosphere is situated between the troposphere and mesosphere, extending from about 10 to 50 kilometers above Earth's surface.
- **Temperature Stability:** It features a stable temperature gradient that decreases from top to bottom.
- **Ozone Layer:** The stratosphere hosts the ozone layer, crucial for absorbing harmful UV radiation.
- **Aircraft Flight:** Commercial jets fly in the lower stratosphere to evade turbulence and increased drag prevalent in the troposphere.
- **Gas Composition:** While holding 19% of the atmosphere's gases, the stratosphere contains minimal water vapor.

Conclusion

- While stratospheric aerosol intervention shows potential as a tool to mitigate the impacts of climate change, it also raises significant ethical, environmental, and geopolitical concerns. The manipulation of the Earth's atmosphere on such a large scale could have unpredictable consequences and may exacerbate existing environmental challenges.

5.5 SHORT ARTICLES

Nagoya Protocol

Context

- Cameroon adopts Nagoya Protocol to benefit from its rich biodiversity.

About Cameroon:

- Country lying at the junction of western and central Africa. 24th largest country in Africa and 54th largest in the world. The capital is

Yaoundé, located in the south-central part of the country.

- It is bordered by Nigeria to the northwest, Chad to the northeast, the Central African Republic to the east, the Republic of the Congo to the southeast, Gabon and Equatorial Guinea to the south, and the Atlantic Ocean to the southwest.

About Nagoya Protocol:

- The Nagoya Protocol is a supplementary agreement to the Convention on Biological Diversity (CBD), adopted in Nagoya, Japan, in 2010, and entered into force in 2014. The protocol aims to promote fair and equitable sharing of benefits arising from the utilization of genetic resources, with a particular focus on traditional knowledge associated with these resources.

Key Elements:

- **Access to Genetic Resources:** The Nagoya Protocol establishes clear rules and procedures for obtaining access to genetic resources and traditional knowledge associated with these resources.
- **Benefit-sharing:** It outlines a framework for the fair and equitable sharing of benefits arising from the utilization of genetic resources. This includes financial benefits, technology transfer, and capacity-building for the countries providing these resources.
- **Traditional Knowledge:** Recognizing the role of traditional knowledge in biodiversity conservation, the protocol emphasizes the importance of respecting, preserving, and maintaining traditional knowledge associated with genetic resources.
- **Implementation:** The Nagoya Protocol encourages the development of national access and benefit-sharing legislation and the establishment of competent national authorities to regulate access and monitor compliance.

World Wetlands Day

Context

- India has increased its tally of Ramsar sites to 80 by adding five more wetlands to the list on the eve of World Wetlands Day 2024.

About World Wetlands Day:

Announcement Date

- On the eve of World Wetlands Day, February 2nd, 2024

World Wetlands Day Theme

- 'Wetlands and Human Wellbeing'

Location of New Ramsar Sites

- **Three sites in Karnataka:** Ankasamudra Bird Conservation Reserve, Aghanashini Estuary, Magadi Kere Conservation Reserve
- **Two sites in Tamil Nadu:** Karaivetti Bird Sanctuary and Longwood Shola Reserve Forest



Ramsar Sites Distribution in India

- Tamil Nadu: 16 sites
- Uttar Pradesh: 10 sites

India's Ramsar Convention Status

- India is a Contracting Party to the Ramsar Convention, signed in 1971

Increase in Ramsar Sites

- The number of Ramsar sites increased from 26 to 80 in the last ten years.
- 38 sites added in the last three years alone

Black-necked Crane

Context

- The Wildlife Institute of India (WII) and the Zoological Survey of India (ZSI) have been actively involved in assessing the population and conserving the black-necked cranes in India.



About Black-necked Cranes in India:

Appearance

- Standing tall at 135 cm with a 235 cm wingspan. The body is pale greyish-white, head, neck, upper legs, and tail are jet-black. A vibrant red patch adorns its crown.
- Both sexes are similar, with males slightly larger. Juveniles have a brownish head and neck, and their plumage is paler than adults.

Habitat and Distribution

- Breeds on the Tibetan Plateau, India, and Bhutan. Inhabits high-altitude lakes, wetlands, and meadows. Some populations migrate seasonally to lower altitudes.

Behavior and Ecology

- Lives in pairs or small family groups during the breeding season. Social birds engaging in complex courtship dances. **Diet includes plants, insects, and small vertebrates.**
- Uses various calls, including trumpeting honks and rattling sounds, to communicate.

Conservation Status

- Classified as "**Vulnerable**" by IUCN. **Threatened** by habitat loss, degradation, and human disturbance.

Brumation

Context

- Reptiles adapt to colder months through brumation, a period of reduced activity and metabolism aimed at conserving energy and resources.



About Brumation:

- Brumation refers to a state of dormancy or reduced metabolic activity observed in certain ectothermic (cold-blooded) animals, mainly reptiles, during colder months.
- It serves as a survival strategy for these animals to cope with adverse environmental conditions such as low temperatures and limited food availability.
- **Reptiles, including snakes, turtles, lizards,** and some amphibians, are the primary animals that undergo brumation. These creatures rely on external heat sources to regulate their body temperature.



World Sustainable Development Summit

Context

- The World Sustainable Development Summit in New Delhi, inaugurated by the Vice-President of India, offers an opportunity to discover sustainable living and the efficient use of natural resources.



About World Sustainable Development Summit: 2024 Summit Theme

- Leadership for Sustainable Development and Climate Justice

Objective

- Recognizing the critical role of leadership in addressing interconnected challenges of sustainable development and climate justice.

Emphasis

- Inclusivity and equity, ensuring all voices are heard, and solutions consider the vulnerabilities and needs of marginalized communities.

Action Focus

- Prioritizing tangible actions and effective implementation of solutions for real-world impact.

Thematic Tracks

- Climate change, green finance, circular economy, clean energy, biodiversity conservation, etc.

Participation

- Ministerial addresses and a youth plenary for diverse perspectives and active engagement.

Special Events and Expo

- Interactive sessions, exhibits, and networking opportunities to facilitate knowledge exchange and collaboration.



Guidelines on use of Green Hydrogen

Context

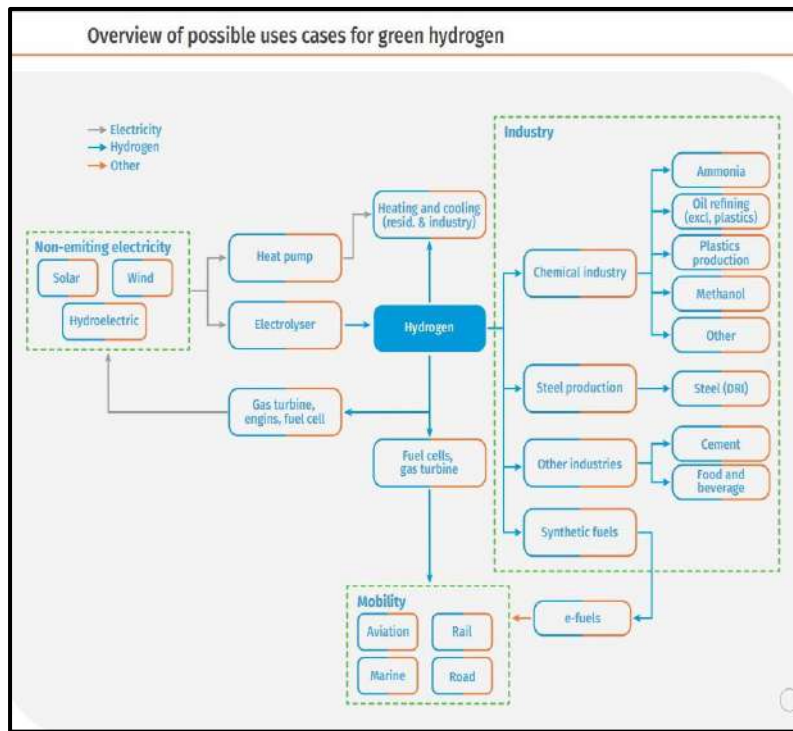
The Government of India has come out with guidelines for undertaking pilot projects for using Green Hydrogen in the transport sector.

Details:

- The “Scheme Guidelines for implementation of Pilot Projects for use of Green Hydrogen in the Transport Sector”, have been issued by the Ministry of New & Renewable Energy (MNRE) on February 14, 2024, under the National Green Hydrogen Mission.

About Scheme Guidelines for Implementation of Pilot Projects for Use of Green Hydrogen in the Transport Sector:

- The Indian government recently launched the Scheme Guidelines for Implementation of Pilot Projects for Use of Green Hydrogen in the Transport Sector under the National Green Hydrogen Mission. This scheme aims to support pilot projects across various transport segments, promoting the adoption of green hydrogen as a clean and sustainable fuel alternative.



Key Features:

- Focus areas:** The scheme supports pilot projects involving green hydrogen (produced using renewable energy) in:
 - Buses
 - Trucks
 - Four-wheelers
 - Development of hydrogen refuelling stations
 - Other innovative uses for green hydrogen in transport
- Financial assistance:** The scheme provides financial support to selected projects, covering up to 50% of the project cost, with a maximum limit of Rs. 20 crore per project.
- Project selection:** A transparent selection process based on technical and financial feasibility, innovation, and potential impact will be used.
- Timeline:** The scheme is currently open for applications until February 5, 2026.



Terai Arc Landscape

Context

- The United Nations Environment Programme (UNEP) and the Food and Agriculture Organization (FAO) have jointly identified seven initiatives worldwide as World Restoration Flagships, aiming to address ecosystem degradation caused by wildfires, drought, deforestation, and pollution through restoration efforts.

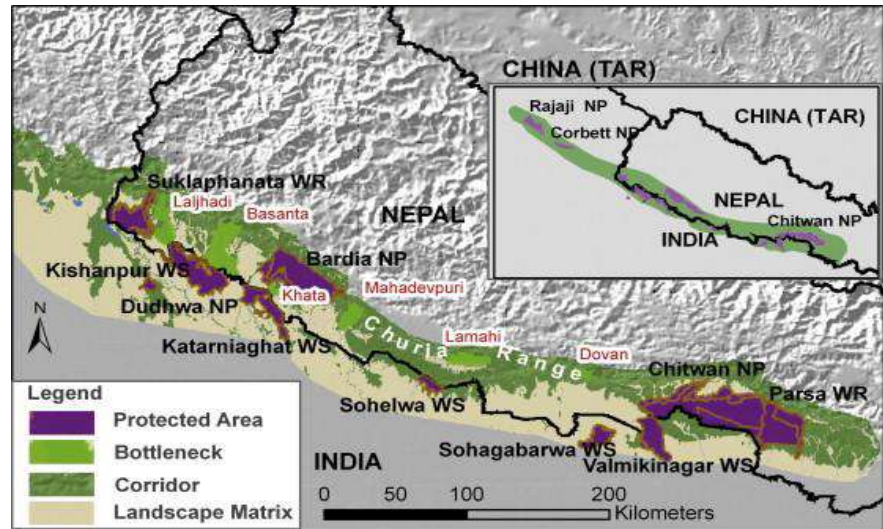
About World Sustainable Development Summit:

About

- The Terai Arc Landscape (TAL) is a significant conservation area spanning both India and Nepal, encompassing a diverse range of ecosystems and wildlife.

Location

- The TAL stretches between the river Yamuna in the west and the river Bhagmati in the east, covering the Shivalik hills, bhabhar areas, and Terai flood plains across Indian states like Uttarakhand, Uttar Pradesh, Bihar, and low-lying hills in Nepal.



Protected Areas

- The landscape includes 13 protected areas, with nine in India and four in Nepal, covering a total area of 49,500 km², with 30,000 km² in India.

Wildlife

- The TAL is home to flagship species like Bengal tigers, greater one-horned rhinos, Asian elephants, along with various other species of cats, antelopes, deer, bears, martens, pangolins, gharials, and crocodiles.

Conservation Efforts

- Organizations like WWF have been actively involved in conservation efforts within the TAL since 2000 to ensure habitat integrity and connectivity for key wildlife populations while supporting local communities with sustainable livelihood options.

Spanning over 5 million hectares, it encompasses diverse ecosystems, including-

- Terai grasslands and savannas: Open plains teeming with wildlife like rhinos, elephants, and tigers.
- Subtropical and Himalayan foothills: Home to rich biodiversity, including endangered species like the Bengal florican and the Asian elephant.
- Sal forests: Dry deciduous forests providing crucial habitat for many animals.
- Wetlands: Important breeding grounds for migratory birds and a source of water for the region.



TN-SHORE

Context

- The Tamil Nadu government has announced a new scheme called TN-SHORE, to revive the coastal resources and protect the endangered species in the 2024-2025 State Budget.

- The TN-SHORE (Tamil Nadu Sustainable Habitat Ocean Resource Ecosystem) scheme is a recently announced initiative by the Tamil Nadu government to revitalize the state's coastal resources across 14 districts spanning 1,076 kilometers.

Objective

- Enhance coastal biodiversity: Protect and restore marine ecosystems, including coral reefs, mangroves, and seagrass meadows.

[About TN-SHORE \(Tamil Nadu Sustainable Habitat Ocean Resource Ecosystem\) scheme:](#)

About

- **Strengthen coastal protection:** Mitigate the impact of climate change and natural disasters through measures like beach nourishment and dune restoration.
- **Improve livelihoods of coastal communities:** Promote sustainable fishing practices, develop eco-tourism initiatives, and create new employment opportunities.
- **Control coastal pollution:** Reduce pollution from industrial and agricultural sources and promote sustainable waste management practices.

Implementation

- Collaborative effort involving government departments, research institutions, NGOs, and local communities.

Specific initiatives

- Establishment of marine protected areas (MPAs)
- Mangrove and seagrass restoration projects
- Beach nourishment and dune restoration
- Sustainable fishing practices promotion
- Development of eco-tourism infrastructure
- Installation of waste treatment facilities
- Capacity building for coastal communities

Sub-National Climate Fund

Context

- A World Bank delegation visited Goa to



discuss setting up India's first sub-national climate resilient green fund.

Details:

- The Sub-national Climate Fund (SCF) is a global blended finance initiative that aims to

accelerate climate action at the sub-national level in developing countries.

About Sub-national Climate Fund (SCF):

Focus:

- Invests in and scales up mid-sized (**typically \$5 million to \$75 million USD**) infrastructure projects in developing countries.
- Targets projects related to sustainable energy, waste and sanitation, regenerative agriculture, and nature-based climate solutions.

Objectives:

- Catalyze long-term climate investment at the sub-national level.
- Deliver certified climate and Sustainable Development Goals (SDGs) impacts.
- Promote nature-based solutions (NbS) for climate change mitigation and adaptation.
- Support inclusive development and women's economic empowerment through project design.

Benefits:

- **Increased Investments:** Encourages private sector participation in climate action at the local level, leading to increased funding for clean energy and sustainable development projects.
- **Enhanced Capacity:** Provides technical assistance to sub-national authorities, empowering them to plan, implement, and manage climate-smart projects.
- **Local Impact:** Addresses climate challenges at the local level, where communities experience the most significant effects.
- **Sustainable Solutions:** Prioritizes projects promoting renewable energy, waste management, and nature-based solutions.



Parhyale Odian

Context

- Researchers in Odisha identified a new species of marine amphipod, named Parhyaleodian, found in Chilika Lake, marking the 16th species in the Parhyale genus and providing valuable insights into regional

biodiversity and the broader marine ecosystem.

About Parhyale Odian:

Discovery of a New Species

- Researchers at Berhampur University in Odisha, India, have identified and named a new species of marine amphipod, a shrimp-like crustacean, from Chilika Lake, Asia's largest brackish water lagoon.

Naming and Significance

- The newly discovered species has been named Parhyaleodian, paying homage to the native language of Odisha, Odia. This discovery adds to the genus Parhyale, increasing the global count of species within the group to 16.



- Parhyaleodian exhibits a brown coloration and measures approximately eight millimeters in length. It features 13 pairs of legs, with the first pair specialized for capturing prey and feeding.

Distinctive Features

- The distinguishing feature of Parhyaleodian from the other 15 recognized species in the genus is a stout, robust seta, a spine-like structure found on the surface of the propodus of the male gnathopod, which constitutes the first pair of legs.

Conservation Efforts

- Specimens of Parhyaleodian have been deposited at the Zoological Survey of India's Estuarine Biology Regional Centre in Gopalpur-On-Sea, Odisha, facilitating further research and conservation initiatives aimed at understanding and preserving this newly discovered species.

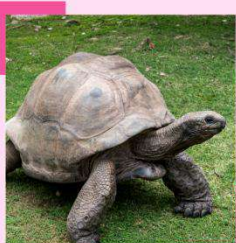
Characteristics of Parhyaleodian

5.6 SNIPPETS



Indian Renewable Energy Development Agency Limited

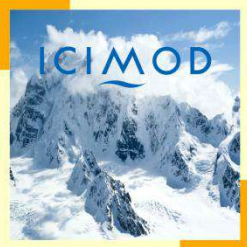
- IREDA was established in 1987 as a Mini Ratna (Category – I) Government of India Enterprise. It operates as a Non-Banking Financial Institution (NBFC) and is administratively controlled by the Ministry of New and Renewable Energy (MNRE).
- The primary purpose behind its formation was to promote, develop, and provide financial assistance for projects related to new and renewable sources of energy as well as energy efficiency and conservation.



Aldabra giant Tortoise

- The Aldabra giant tortoise, *Aldabrachelys gigantea*, is the second-largest species of land tortoise globally, after the Galapagos giant tortoise.
- The species evolved from ancestors in Madagascar, with the *Aldabrachelys* lineage migrating to Seychelles and later evolving into the Aldabra giant tortoise.
- Classified as "Vulnerable" by the IUCN due to past threats like habitat loss, hunting, and introduced predators.

APTI PLUS




ICIMOD

International Centre for Integrated Mountain Development

- ICIMOD is a regional knowledge and learning center serving the eight regional member countries of the Hindu Kush Himalayan (HKH) region: Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan.
- Established in 1983, ICIMOD works to promote sustainable mountain development through knowledge generation, capacity building, and regional cooperation.

APTI PLUS



New Ramsar Sites

- Ankasamudra Bird Conservation Reserve, Karnataka
- Aghanashini Estuary, Karnataka
- Magadi Kere Conservation Reserve, Karnataka
- Longwood Shola Reserve Forest, Tamil Nadu

APTI PLUS




Invasive thrips

- Thrips parvispinus, commonly known as the greenhouse thrips, is a tiny insect belonging to the Thysanoptera order.
- They are major agricultural pests, particularly in greenhouses and other controlled environments, causing damage to various crops and ornamental plants.




APTI PLUS



Trichoglossum syamviswanathii

- Scientists have identified a new species of fungus in Kerala that contributes to increasing soil fertility. The fungus was discovered in the bamboo forest at the Forest Research Institute's Palapilli Field Research Centre in Thrissur.
- The newly discovered fungus has been named 'Trichoglossum Shyam Viswanathi' after Dr. Shyam Viswanath, the former director of the Kerala Forest Research Centre. The naming is in recognition of Dr. Shyam Viswanath's significant contributions to forest research.





Golden-backed Frog

APTI PLUS

- Scientists found a Rao's Golden-backed frog in the Western Ghats with a white-coloured growth on its side, identified as a Bonnet mushroom. This marks the first known instance of a mushroom growing on a living frog.
- Endemic to the Western Ghats of Karnataka and Kerala, particularly above the Palghat Gap, a distinct species of frog thrives in relative abundance, contributing to the region's biodiversity.
- This thumb-sized amphibian has adapted to its environment, measuring approximately the size of a human thumb. Preferring the lush surroundings near streams, ponds, and other water bodies, these frogs find ideal locations for laying their eggs and sourcing their food.



Central Asian Flyway

APTI PLUS

- Proposal Origin: Introduced by India and supported by BirdLife International and 30 other governments from Russian Siberia to the Maldives.
- Objective: To establish an initiative under CMS for the Central Asian Flyway.
- Population Restoration: Address the decline in populations of over 240 migratory bird species in the flyway, with 48 species listed as Globally Threatened or Near Threatened.



Purple Frog

APTI PLUS

- The Purple Frog is commonly known by various names, including the Purple Frog, Maveli Frog, and Pignose Frog. These names are likely used by different communities or regions, reflecting the diverse ways people identify the species.
- The Purple Frog's designation as a living fossil suggests its existence alongside dinosaurs, providing a unique window into evolutionary history.
- The International Union for Conservation of Nature (IUCN) has classified the Purple Frog as "Endangered", signifying a high risk of extinction if conservation efforts are not implemented.



Spotted Deer

APTI PLUS

- Chital deer, also known as Cheetal deer or Axis deer, thrive in various habitats such as grasslands, open forests, and scrub jungles across the Indian subcontinent.
- Chital typically live in herds consisting of 10 to 50 individuals, primarily composed of females and young with one or two dominant males.
- Chital play a vital role in their ecosystem by dispersing seeds through grazing. Additionally, they contribute to nutrient cycling by consuming shed antlers, which provide them with calcium and other essential nutrients, showcasing their adaptability and ecological significance.





Cantor's Giant Softshell Turtle

- The Cantor's giant softshell turtle is an extremely rare species native to South and Southeast Asia.
- It is facing critical endangerment due to habitat destruction and human activities like harvesting for meat and accidental capture in fishing gear.
- The species is classified as Critically Endangered on the IUCN Red List, indicating a high risk of extinction.



5.7 1 MAINS & 5 MCQs

Q1. With rapid human population growth and expanding development, human-wildlife conflicts are escalating globally. Analyze the factors contributing to these conflicts and suggest a multi-pronged approach for achieving peaceful coexistence between humans and wildlife.

Introduction

- Briefly define human-wildlife conflict and highlight its increasing prevalence globally.

Factors Contributing to Conflict:

- Habitat Loss and Fragmentation
- Poaching and Illegal Wildlife Trade
- Human Encroachment on Wildlife Areas

Impacts of Conflict:

- Loss of Life and Injuries (Humans & Wildlife)
- Economic Losses (Livestock Depredation, Crop Raiding)

Multi-pronged Approach for Coexistence:

- Human-Wildlife Conflict Management Strategies (Early Warning Systems, Eco-tourism initiatives)
- Policy and Law Enforcement Measures to Mitigate Poaching and Illegal Wildlife Trade
- Research and Development of Non-lethal Deterrent Methods

Conclusion

- Emphasize the importance of a holistic approach towards achieving peaceful coexistence between humans and wildlife. This can ensure the conservation of biodiversity while minimizing human-wildlife conflict and promoting sustainable development.

Q2. Which of the following statements are correct about the Aldabra giant tortoise's habitat?

1. They are primarily found on Aldabra Atoll in the Seychelles islands.
2. They have been introduced to other islands like Mauritius and Réunion.
3. They prefer to live in dense forests with tall trees.
4. They can be found in diverse environments like beaches, grasslands, and mangrove swamps.

How many of the above statements are correct?

- A) Only one
- B) Only two
- C) Only three
- D) All four

Q3. What is the primary benefit of brumation for reptiles?

- A. Increased reproductive activity
- B. Enhanced foraging abilities
- C. Conservation of energy and resource minimization
- D. Improved social interactions

Q4. Nagoya Protocol is related to which of the following subjects?

- A) Biosafety to the Convention on Biological Diversity
- B) Access to Genetic Resources and the Fair and Equitable Sharing of benefits
- C) Reduce greenhouse gas emissions
- D) Reduce the usage of Ozone-depleting substances

Q5. The IUCN categorizes the Black-Necked Crane as:

- A) Critically Endangered
- B) Endangered
- C) Vulnerable

D) Near Threatened

Q6. What is Thrips Parvispinus, recently in the news?

- A) A new species of flower
- B) Invasive pest affecting chilli crops
- C) Exotic bird species
- D) Medicinal plant

Q7. What was the name of the mushroom growing on the frog?

- A) Bonnet mushroom
- B) Oyster mushroom
- C) Morel mushroom
- D) Chanterelle mushroom

ANSWERS: 2) C, 3) C, 4) A, 5) C, 6) B, 7) A

6. SOCIAL ISSUES

6.1 DEMAND FOR PAID MENSTRUAL LEAVE AND GENDER EQUALITY

Context

- The demand for paid menstrual leave is part of a broader movement advocating for gender equality in the workplace.

Detail

- Menstrual leave refers to a policy that allows individuals to take time off from work during their menstrual cycle, with full or partial pay. This demand is rooted in the recognition of the unique challenges and health-related issues that individuals with menstruation face, and it aligns with the broader goal of achieving gender equality in the workforce.

Why need Menstrual leave?

- **Physical discomfort:** Menstruation can bring physical symptoms such as cramps, fatigue, headaches, and nausea. For some individuals, these symptoms can be severe and may impact their ability to perform effectively at work.
- **Emotional well-being:** Hormonal fluctuations during menstruation can affect mood and emotional well-being. Some people may experience heightened emotional sensitivity, mood swings, or increased stress during this time.
- **Productivity and efficiency:** Providing menstrual leave acknowledges that employees may be more productive and efficient if they are given the flexibility to manage their work and personal well-being during their menstrual cycle.
- **Equality and inclusivity:** Menstrual leave promotes gender equality and inclusivity by recognizing the unique challenges faced by individuals who menstruate. It helps create a workplace culture that is sensitive to the diverse needs of its employees.
- **Reducing stigma:** Menstrual leave can contribute to reducing the stigma surrounding

menstruation by openly acknowledging it as a valid reason for taking time off. This can help create a more supportive and understanding workplace environment.

- **Promoting employee health:** Recognizing the physical and emotional toll of menstruation and allowing individuals to take menstrual leave can contribute to overall employee well-being and health.

Arguments against Paid Menstrual Leave

- **Equality and Discrimination Concerns:** Providing paid menstrual leave exclusively to women might be seen as discriminatory. It could reinforce gender stereotypes and potentially lead to discrimination against women in the workplace, as employers may be concerned about the additional costs and potential disruptions.
- **Impact on Hiring and Promotion:** Employers might be hesitant to hire or promote women if they perceive that providing menstrual leave could be a burden on the organization. This could inadvertently create barriers for women in career advancement.
- **Resource Allocation:** Some argue that resources should be directed toward creating a more inclusive work environment overall, rather than focusing on specific types of leave. This could include better accommodations for all employees, regardless of gender or specific health needs.
- **Productivity and Efficiency Concerns:** Critics argue that introducing paid menstrual leave may lead to concerns about productivity and efficiency. Employers may worry about potential abuse of the policy or a decrease in overall productivity if a significant number of female employees take menstrual leave regularly.
- **Stigmatization:** Introducing a specific type of leave for menstruation could inadvertently

reinforce societal stigmas around women's health. Some argue that it may lead to the perception that menstruation is a condition that requires special treatment, potentially contributing to the marginalization of women in the workplace.

- **Flexibility and Individual Needs:** Advocates for workplace flexibility argue that rather than creating a specific menstrual leave policy, workplaces should focus on offering flexible work arrangements that allow all employees to manage their personal needs, including health concerns, without the need for a designated leave category.

- **Potential for Exploitation:** Some worry that a policy specifically addressing menstrual leave could be exploited or used as an excuse for time off, even when it is not genuinely needed. This could lead to challenges in managing absenteeism and may result in scepticism from employers.
- **Legal and Administrative Challenges:** Implementing and managing a paid menstrual leave policy could present legal and administrative challenges for employers. Determining eligibility, tracking leave, and ensuring compliance with labour laws could be complex and time-consuming.

Promoting Gender Equality Beyond Menstrual Leave		
Key Area	Explanation	Examples
Addressing Unconscious Bias	Unconscious biases are subtle, often unintentional preferences we have for certain groups or individuals. These biases can shape decisions we make about hiring, promotions, and everyday interactions, with disadvantaged women in the workplace.	Mandatory training: Workshops or online modules that cover different types of unconscious bias, their impact on the workplace, and strategies to mitigate them. Anonymous reporting system: A safe space for employees to report experiences indicative of bias, ensuring accountability without fear of retaliation.
Flexible Work Arrangements	Traditional work schedules and structures can disproportionately burden women, who often shoulder more care giving responsibilities. Flexible work options help level the playing field.	Flexible hours: Allowing employees to start and end their workday within a broader range, accommodating personal needs. Remote work: Letting employees work from home some or all of the time, allowing flexibility for care giving duties. Job sharing: Two employees split the duties and responsibilities of a single full-time position.
Equal Pay and Opportunities	Closing the gender pay gap and ensuring equal opportunities for advancement are fundamental for gender equality in the workplace.	Pay audits: Regularly analyze compensation by gender, making adjustments where discrepancies are found. Transparent promotion processes: Clearly defined criteria for advancement, shared across all levels. Blind resume reviews: Initial screening based on skills and qualifications without revealing names or gender indicators.
Mentorship and Sponsorship	Women often lack the same access to networks and support that men benefit from. Mentorship and	Mentorship: Pairing women employees with more senior colleagues for guidance and career development.

	sponsorship programs intentionally bridge this gap.	Sponsorship: Senior leaders actively advocate for high-potential female employees, putting them forward for promotions and leadership opportunities.
Inclusive Workplace Culture	A truly inclusive culture goes beyond policies and actively celebrates diversity, making everyone feel valued and respected.	Gender-neutral language: Revise company documents, job postings, and internal communications to avoid gendered terms and assumptions. Diversity & inclusion initiatives: Company-sponsored events, training sessions, and campaigns that promote awareness and understanding of diverse perspectives.

Conclusion

- Paid menstrual leave, while fostering awareness, might widen the gender gap and reinforce social stigma. Addressing individual needs and combating the stigma around menstruation are crucial. A broader focus on equal pay and opportunities is vital to achieving true gender equality.

6.2 EMPLOYABILITY OF WOMEN IN INDIA

Context

- The Supreme Court of India has ruled that any rules or regulations that disadvantage women in employment based on their marital status or domestic responsibilities are unconstitutional and discriminatory.

Key Highlights of the Judgement

- **Coarse Gender Discrimination:** The court emphasizes that rules terminating the employment of women due to marriage or domestic issues amount to "coarse gender discrimination." Such rules are deemed unconstitutional and are seen as undermining human dignity, the right to non-discrimination, and fair treatment.
- **Patriarchal Rule Criticized:** The court criticizes the acceptance of patriarchal rules that discriminate against women based on their marital status. It asserts that these rules go against constitutional principles and human rights.
- **Legal Impermissibility:** Laws and regulations that exhibit gender-based bias are deemed constitutionally impermissible. The court's stance emphasizes the need for legal frameworks that uphold equality and non-discrimination, particularly in the context of gender.

The observations were made in the context of a case involving a woman Permanent Commissioner Officer in the Military Nursing Service who was discharged from service for getting married. The Supreme Court upheld the rights of the officer, declaring the rule against marriage applicable only to women nursing officers as "manifestly arbitrary." The court directed the Union Government to pay ₹60 lakh in compensation.

Women and Employability in India

- India is a country with a large population of young people who aspire to contribute to the economic and social development of the nation. However, not all of them have the opportunity to do so, especially women. **The employability of women in India refers to their ability to gain and maintain employment in various sectors and industries.** It is influenced by many factors, such as education, skills, social norms, gender discrimination, safety, and infrastructure.

- Traditionally, **social structures and limited access to education restricted Indian women's participation in the workforce**. However, recent decades have witnessed a significant shift. Increased female literacy rates, growing awareness of gender equality, and economic reforms have opened doors for women in the professional world.

Current Status of Female Employability

- **Uneven Progress:** Despite the rise, India's Female Labor Force Participation Rate (FLFPR) remains low compared to the global average. It hovers around 25% compared to the global average of 46%. This indicates a significant underutilization of women's potential.
- **Urban-Rural Divide:** The picture is far from uniform. Urban areas boast a higher FLFPR due to greater job opportunities and educational access. Rural India, however, presents a different story. Traditional gender roles and limited job options in agriculture keep women's participation low.
- **Sectored Segregation:** Even within the workforce, women tend to be concentrated in specific sectors. Education, healthcare, and public administration see a higher representation of women. Conversely, Science, Technology, Engineering, and Math (STEM) fields and higher management positions remain underrepresented.

Significance of Increased Female Employability	
Key Points	Explanation
Economic Growth	<ul style="list-style-type: none"> • Increased Household Income: When women earn, it directly contributes to household income, improving the family's standard of living. This can lead to increased spending on essentials like food, education, and healthcare. • Stimulated Economic Activity: Women's participation increases the overall workforce size, leading to higher productivity and economic output. This can attract new businesses and investments, further boosting the economy. • Broaden Tax Base: With more women earning income, the government's tax base expands. This additional revenue can be used for infrastructure development, social welfare programs, and public services, benefiting everyone.
Social Upliftment	<ul style="list-style-type: none"> • Empowerment of Women: Earning an income gives women greater financial independence and self-reliance. This empowers them to make decisions about their lives, challenge societal norms, and participate more actively in public spheres. • Improved Social Status: When women work, it challenges traditional gender roles and societal perceptions. This can lead to greater respect for women and their contributions, breaking down gender stereotypes. • Positive Impact on Families: Increased income allows families to invest in their children's education and healthcare. This can lead to a more educated and healthy next generation, contributing to social progress.
Diversity and Innovation	<ul style="list-style-type: none"> • Enhanced Problem-Solving: Women bring different perspectives and experiences to the workplace, leading to more creative and comprehensive solutions to problems. This can benefit companies seeking innovative solutions and improved processes. • Better Decision-Making: Diverse teams consider a wider range of factors when making decisions, leading to more well-rounded and effective strategies. • Increased Innovation: A diverse workforce fosters a culture of innovation.

Women may be more likely to challenge the status quo and propose new ideas, leading to breakthroughs and advancements in various fields.

Challenges Hobbaling Female Employability

- **Gender Stereotypes:** Deeply ingrained societal expectations often confine women to domestic roles. This discourages them from pursuing careers or limits their aspirations to specific sectors deemed "feminine."
- **Work-Life Balance Issues:** Balancing work and family life remains a major hurdle. Lack of affordable childcare facilities, limited support from families, and a lack of flexible work arrangements make it difficult for women to manage both spheres effectively.
- **Skill Gaps:** Educational systems may not equip women with the skills needed for the modern job market. Traditional curricula might not adequately address technical skills, communication skills, or leadership training, leaving women unprepared for competitive environments.
- **Safety Concerns:** Issues like sexual harassment at the workplace and lack of safe transportation can deter women from entering or staying in the workforce. Fear for their safety restricts mobility and limits job options, particularly in informal sectors.

Steps Taken

- **Skill Development Initiatives:** The government has launched several programs to equip women with vocational skills and job training in sectors like IT, apparel, and manufacturing. These initiatives aim to bridge the skill gap and enhance women's employability.
- **Maternity Leave Benefits:** Extended maternity leave policies provide some support for working mothers. However, concerns remain regarding job security and potential career stagnation during these periods.
- **Reservations in Government Jobs:** The government reserves a certain percentage of seats in government jobs for women. This policy aims to increase female representation

in the public sector and set an example for private employers.

Way Forward

- **Changing Mindsets:** Societal attitudes need a significant shift. We need to value women's contributions in both domestic and professional spheres. Public awareness campaigns, educational initiatives, and community dialogues can play a crucial role in achieving this shift.
- **Flexible Work Arrangements:** Policies promoting flexible work schedules, part-time options, and on-site childcare facilities can significantly ease work-life balance concerns for women.
- **Education Reforms:** Educational systems need to be revamped to equip girls with relevant skills and career guidance. This includes introducing STEM subjects at a younger age, providing career counselling services, and promoting entrepreneurship among women.
- **Addressing Safety Concerns:** Ensuring safe workplaces and public spaces is crucial for women's participation. Strict enforcement of laws against sexual harassment, better public transportation infrastructure, and well-lit streets are essential steps in this direction.
- **Strengthening Enforcement:** Existing laws protecting women's rights in the workplace need effective implementation and enforcement. Robust grievance redressal mechanisms and awareness about these mechanisms are crucial for creating a safe and supportive work environment.

Conclusion

- Women's employability is a crucial factor that can shape the future of India. By improving women's employability and employment, India can achieve its economic and social goals and fulfil its commitments to the

Sustainable Development Goals (SDGs) and the Agenda 2030. It can also empower women to realize their full potential and

contribute to the development of their families, communities, and the nation.

6.3 MARGINALIZATION OF ASHA WORKERS

Context

- ASHA workers grapple with being overworked and underpaid, engaging in a 'triple shift' involving domestic chores, community health work, and health centre responsibilities, leading to exhaustion.

About ASHA workers

- India is a vast and diverse country with a population of over 1.3 billion people, of which more than 60% live in rural areas. Providing quality and accessible health care to such a large and dispersed population is a major challenge for the government and the health system. To address this challenge, the Ministry of Health and Family Welfare (MoHFW) launched the National Rural Health Mission (NRHM) in 2005, with the aim of improving the availability and affordability of health services in rural areas.
- One of the key components of NRHM is the Accredited Social Health Activist (ASHA) program, which employs more than one million female community health workers across the country. The aim is to improve the availability and accessibility of basic health services in rural areas.

Who are ASHA workers?

- ASHA workers are selected from the community and undergo training to acquire basic healthcare skills. They are usually educated up to the 8th to 10th standard and receive training in areas such as maternal and child health, family planning, immunization, and various health promotion activities.
- ASHA workers act as a link between the community and the health system. They are selected from and accountable to the village that they serve and are trained to perform various tasks related to health promotion, disease prevention, and basic curative care.
- They also serve as a depot holder for essential medicines and supplies, such as oral rehydration salts, iron folic acid tablets, chloroquine, disposable delivery kits, oral pills, and condoms.
- ASHA workers often receive performance-based incentives to encourage their active participation in promoting healthcare services within their communities.

What do ASHA workers do?

ASHA workers have a wide range of responsibilities that cover various aspects of maternal and child health, communicable and non-communicable diseases, nutrition, sanitation, and healthy living. Some of their main tasks include:

- Maternal and Child Health: Encouraging pregnant women to undergo regular antenatal check-ups. Promoting institutional deliveries and ensuring that deliveries take place in healthcare facilities with skilled birth attendants. Facilitating postnatal care for both mothers and newborns.
- Immunization: Mobilizing and motivating families to ensure that children receive timely vaccinations as per the national immunization schedule. Keeping track of immunization records and identifying and addressing barriers to vaccination.
- Family Planning: Educating families about different family planning methods and providing counselling on contraceptive options. Distributing contraceptives and promoting family planning to control population growth and improve maternal and child health.
- Basic Healthcare: Providing basic healthcare services at the community level, including first aid for common illnesses and injuries. Referring individuals with serious health conditions to higher healthcare facilities for advanced treatment.

- **Health Education:** Conducting health awareness campaigns to educate the community about preventive healthcare practices and healthy living. Promoting hygiene and sanitation practices within the community to prevent the spread of diseases.
- **Data Collection and Reporting:** Keeping accurate and up-to-date records of health-related data within the community. Reporting health events, disease outbreaks, and other relevant health indicators to higher health authorities.
- **Community Mobilization:** Mobilizing the community to actively participate in various health programs and initiatives. Facilitating community engagement in local health planning and decision-making processes.
- **Participating in Health Programs:** Supporting and participating in various health programs, such as health surveys, health camps, and school health initiatives.
- **Referral System:** Acting as a link between the community and the formal healthcare system by facilitating the referral of individuals to higher healthcare facilities when necessary.

What are the challenges faced by ASHA workers?

- **Inadequate Training and Support:** ASHA workers often receive insufficient training, impacting their ability to address complex health issues. Limited supervision and support from the health system can leave them feeling isolated in their work.
- **Low Remuneration and Incentives:** ASHA workers are often compensated inadequately for their efforts, considering the significant responsibilities they bear. Low financial incentives may affect their motivation and ability to sustain their work.
- **Heavy Workload and Multiple Demands:** ASHA workers handle a broad range of responsibilities, leading to a heavy workload. Balancing multiple demands from different health programs can be overwhelming and affect their efficiency.
- **Lack of Respect and Recognition:** ASHA workers may face a lack of respect and recognition, both from the community and health staff. This lack of acknowledgement can impact their morale and job satisfaction.
- **Difficult Working Conditions:** ASHA workers operate in challenging environments, dealing with factors like long distances, poor road conditions, and a lack of transportation. These difficulties can make it challenging to reach remote areas and provide timely healthcare services.
- **Safety and Security Issues:** ASHA workers often face safety and security concerns, especially during night visits or when responding to outbreaks or emergencies. Ensuring their safety becomes a critical consideration for effective service delivery.
- **Limited Career Progression:** ASHA workers may experience limited opportunities for career progression and personal growth. The absence of avenues for professional development can impact their long-term commitment to the role.



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Steps taken to support ASHA workers

- **Increased Honorariums:** The government has periodically increased the honorariums for ASHA workers, linking it to their performance and the successful implementation of health programs.
- **Insurance Coverage:** ASHA workers are provided with insurance coverage under schemes such as Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) and Pradhan Mantri Suraksha Bima Yojana (PMSBY). This offers financial protection in case of accidents or unfortunate events.
- **Smartphones for Data Collection:** The ASHA Soft project involves providing smartphones to ASHA workers, facilitating data collection, reporting, and communication. This enhances their efficiency in managing health-related information.
- **ASHA Certification Program:** The introduction of the ASHA certification program aims to enhance the skills and competencies of ASHA workers. This training program equips them with updated knowledge to carry out their responsibilities effectively.
- **Grievance Redressal Mechanisms:** Grievance redressal mechanisms have been established at various levels to address the concerns and issues faced by ASHA workers. This helps in resolving problems promptly and ensuring a supportive work environment.
- **Capacity Building and Training:** Ongoing efforts are made to provide capacity building and training programs for ASHA workers. This ensures that they stay updated on the latest healthcare practices and technologies.
- **Supportive Policies:** Implementation of supportive policies that address the broader issues faced by ASHA workers, including those related to career progression, working conditions, and recognition.

Way Forward

- **Continuous Training and Skill Development:** Provide regular training sessions, refresher courses, mentoring, and constructive

feedback to keep ASHA workers updated on best practices, new healthcare technologies, and evolving health guidelines.

- **Timely Incentives and Reimbursements:** Ensure timely payment of incentives and reimbursement of expenses to ASHA workers. This contributes to their financial stability and motivates them to continue their essential work.
- **Expanded Role in Primary Healthcare:** Enhance the role of ASHA workers in primary healthcare delivery by involving them in screening, diagnosis, and treatment of common diseases. This can contribute to improved healthcare accessibility and outcomes.
- **Career Progression Opportunities:** Establish a career ladder for ASHA workers, enabling them to pursue further education and training to become auxiliary nurse midwives, staff nurses, or other health professionals. This can provide them with career progression and recognition.
- **Involvement in Decision-Making:** Encourage and facilitate the participation of ASHA workers in decision-making processes at various levels of the healthcare system. Their insights and experiences are valuable for shaping effective health policies.
- **Recognition and Rewards:** Recognize and reward the achievements and innovations of ASHA workers in healthcare. Public acknowledgement and appreciation contribute to boosting their morale and reinforcing their importance in the community.
- **Community Engagement:** Strengthen community engagement by involving ASHA workers in local health planning, emphasizing the importance of community participation in healthcare decision-making.
- **Technological Integration:** Continue integrating technology into the ASHA program, providing tools like smartphones and apps to facilitate data collection, reporting, and communication. This enhances

their efficiency and contributes to better healthcare management.

- **Monitoring and Evaluation:** Establish robust monitoring and evaluation mechanisms to assess the performance and impact of the ASHA program. This can help identify areas for improvement and ensure the program's effectiveness.
- **Health System Collaboration:** Foster collaboration between ASHA workers and the broader health system, ensuring effective coordination and integration of their efforts with other healthcare providers and facilities.

Conclusion

- The marginalization of Accredited Social Health Activists (ASHA) workers is a concerning issue, with challenges ranging from inadequate compensation and lack of job security to limited recognition for their pivotal role in community healthcare. Addressing these issues is crucial to ensure the well-being and motivation of ASHA workers, who play a critical role in India's primary healthcare system.

6.4 SHORT ARTICLES

Gender Budgeting

Context

- The Indian government allocated ₹3 lakh crore for the gender budget in 2024-25, representing 6.5% of the total expenditure. This is the highest allocation ever and a 40% increase over the previous year.

Details

- Gender budgeting is a process that involves **creating or assessing budgets from a gender viewpoint**. It is also known as gender-sensitive budgeting. Through gender budgeting, governments **aim to advance equality by analyzing how budgetary decisions impact men and women differently**. This approach ensures that financial commitments align with gender commitments.
- The gender Budget within the Union budget provides an estimate of budgetary allocations and expenditures targeted towards women and girls.
- **The practice of issuing an annual Gender Budgeting Statement (GBS) as part of the Union budget started in 2005-06**. The number of ministries and departments included in the GBS has more than doubled from 14 to 38 over the past two decades.

Allocation Breakdown

- **The Ministry of Rural Development receives the highest allocation of nearly 35%**, followed

by the Ministry of Education, the Ministry of Drinking Water and Sanitation, the Ministry of Health and Family Welfare, and the Ministry of Housing and Urban Affairs.

- The gender budget includes innovative allocations, such as the Nammo Drone Didi scheme training women to operate drones for agricultural purposes. Other provisions include Mahila barracks with separate toilets, an increased budget for the DISHA program for women in science, and enhanced allocations under pension and skill training schemes for women entrepreneurs.

Challenges and Awareness

- **The gender budget continues to be concentrated in a few schemes and ministries**, reflecting challenges in widespread application and awareness of gender budgeting methods.
- Despite the intentions of ministries to prioritize gender equality initiatives, low awareness of gender budgeting accounting methods and gender mainstreaming in fiscal policy remains a constraint.

Definition

- Gender budgeting is a process that integrates a gender perspective at all levels of the budgetary process - formulation, implementation, and evaluation.

Objectives

- Identify and address gender-based inequalities.
- Allocate resources to promote gender equality.
- Monitor and evaluate the gender impact of budgetary decisions.

Key Components

- **Gender Analysis:** Examine budgetary policies and their impact on different genders.
- **Gender-Disaggregated Data:** Collect and use data to analyze how budget decisions affect women and men differently.

Stages in Budget Cycle

- **Formulation:** Incorporate gender perspectives during the development of budget policies.
- **Implementation:** Ensure budget allocations address gender disparities.
- **Evaluation:** Assess the gender impact of budgetary decisions.

Budget Categories

- **Revenues:** Analyze the gender implications of tax policies.
- **Expenditures:** Assess how government spending affects different genders.
- **Public Services:** Examine the provision of services like healthcare and education.

Policy Areas

- **Education:** Ensure equitable access to educational resources.
- **Health:** Address the healthcare needs of all genders.
- **Employment:** Promote equal opportunities in the workforce.

Challenges

- **Data Availability:** Lack of gender-disaggregated data.
- **Capacity Building:** Limited expertise in gender-responsive budgeting.
- **Resistance to Change:** Resistance from traditional budgetary processes.

Success Indicators

- **Gender Equality Index Changes:** Improvement in indices measuring gender equality.
- **Resource Allocation:** Equitable distribution of resources among genders.

- **Policy Impact:** Positive changes in policies affecting gender.

Examples

- **South Africa:** Integrated gender-responsive budgeting in national budgetary processes.
- **Sweden:** Utilizes gender budgeting to address pay gaps and promote gender equality.

Conclusion

- The detailed analysis of the gender budget for 2024 reflects both positive developments and areas for improvement. While the increased allocation demonstrates a commitment to advancing women's empowerment, continued efforts are essential to address challenges, enhance awareness, and ensure the effective implementation of gender budgeting principles.

LABHA (Laghu Bana Jatya Drabya Kraya) Yojana

Context

- The Odisha government has launched LABHA Yojana, a 100% state-funded minimum support price (MSP) scheme for minor forest produce (MFP) collected by tribals.

About LABHA ('Laghu Bana Jatya Drabya Kraya') Yojana

Type of Scheme

- 100% State-funded Minimum Support Price (MSP) scheme for Minor Forest Produce (MFP)

Decision's Significance

- The scheme is expected to have a significant impact on the state's large tribal population, contributing to their socio-economic empowerment. Additionally, it is likely to strengthen the political base of the ruling BJD in tribal pockets and forest fringe areas.

Determining MSP

- Under the scheme, the MSP of Minor Forest Produce (MFP) will be determined annually by the State government.

Primary Collector

- A primary collector, who is typically a tribal person, will be able to sell the MFP at the MSP. The Tribal Development Cooperative

Corporation Limited of Odisha (TDCCOL) will procure the MFP collected at the procurement centres.

Integration with Mission Shakti

- The LABHA Yojana will integrate efforts with Mission Shakti's Women Self Help Groups (SHGs) as 99% of primary collectors are tribals, with the majority being women.
- Procurement centres will be managed by SHGs and other notified agencies assisted by TDCCOL.

Financial Allocation

- The State government has initially earmarked ₹100 crore for the scheme. Additionally, SHGs or any other agency involved will receive a 2% commission.

Beneficiary Transfer

- Upon collection, the amount will be transferred as a Direct Benefit Transfer (DBT) to the beneficiary's account.

Expected Beneficiaries

- The scheme aims to benefit 30,000 tribal beneficiaries initially, with expectations to soon exceed one lakh beneficiaries.

Procurement Automation System

- The scheme incorporates a procurement automation system to capture the total collection of MFPs, details of primary collectors, and procurement points.
- It aligns with the State's 'Vision 5T' framework, focusing on teamwork, technology, transparency, and time leading to transformation.
- The use of technology ensures transparency and brings greater benefits to tribal people.

Further Sales and Value Addition

- TDCCOL will undertake e-tendering for further sales and explore value addition and processing units to enhance the value of the procured MFP.

Tamarind Processing Plant

- The State government is setting up a tamarind processing plant in Rayagada at an estimated investment of ₹25 crore.
- The plant will use tamarind procured through the LABHA Yojana for value addition,

providing additional avenues for income generation.

Impact on Distress Sales

- The LABHA Yojana aims to eliminate the possibility of distressed sales of produce to middlemen, ensuring fair and remunerative prices for tribal collectors.

Minor Forest Produce (MFP)

- MFP refers to **non-timber forest products of plant origin that are collected by tribal and other forest-dwelling communities**. These products serve as a means of subsistence and livelihood for these communities.
- MFP includes a diverse range of products such as bamboo, honey, lac, tamarind, mahua flowers, sal seeds, gums, resins, medicinal plants, and herbs.
- **MFPs are a major source of income and food security for approximately 300 million people in India**. Scheduled Tribes, constituting about 8.6% of the population, heavily rely on MFP for their livelihood.

Challenges Faced by MFP Collectors

- Prices for MFP often remain low and fluctuate, affecting the income of collectors.
- Middlemen often exploit collectors, paying them inadequate prices for their products.
- Inadequate infrastructure for storage and processing leads to wastage and reduces the value of MFP.
- Many MFPs have a limited shelf life, making timely processing and marketing crucial.
- Lack of access to markets hinders the ability of collectors to get fair prices for their produce.

Government Intervention

- In 2013, the Government of India initiated the "Mechanism for Marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) and Development of Value Chain for MFP" scheme.
- This scheme aims to address the challenges faced by MFP collectors and ensure fair and remunerative prices for their produce.
- The scheme is **implemented by the Ministry of Tribal Affairs (MoTA) in collaboration with TRIFED (Tribal Cooperative Marketing**

Development Federation of India), a national-level cooperative federation dedicated to tribal development.

- **Objectives of the Scheme:**
 - Providing Minimum Support Price (MSP) to MFP collectors to ensure a fair income.
 - Developing a value chain for MFP to enhance their market value.
 - Alleviating challenges such as exploitation, lack of infrastructure, and limited market access.
- TRIFED plays a crucial role in the implementation of the scheme by coordinating marketing efforts, developing value chains, and ensuring the welfare of tribal communities involved in MFP collection.

Challenges

- **Implementation Issues:** Challenges may arise in the smooth execution of the MSP scheme due to administrative and logistical hurdles. Delays or inefficiencies in implementation may hinder the timely and effective distribution of MSP benefits to the intended beneficiaries.
- **Identification of Beneficiaries:** Properly identifying and including eligible gatherers and farmers can be challenging, leading to the potential exclusion of deserving individuals or the inclusion of non-targeted ones. Inaccurate beneficiary identification could undermine the scheme's effectiveness and fail to reach those who genuinely need support.
- **Market Dynamics:** Changes in market conditions, demand-supply dynamics, and external factors can influence the effectiveness of the MSP scheme. Fluctuations in market dynamics may affect the ability of the MSP to provide fair and remunerative prices to MFP collectors, potentially impacting their income.
- **Commodity-specific Challenges:** Different MFPs may present unique challenges, such as variability in quality and quantity, which can affect pricing and procurement strategies. Managing the diverse characteristics of various MFPs is crucial to ensuring a fair and consistent MSP and failure to address

commodity-specific challenges may lead to disparities among collectors.

Way Forward

- **Strengthening Implementation:** Improve the efficiency of implementing agencies by addressing administrative and logistical bottlenecks. A more efficient implementation process ensures that MSP benefits reach the grassroots level in a timely and effective manner.
- **Community Involvement:** Enhance community participation in decision-making processes related to the MSP scheme. Involving communities ensures that the needs and perspectives of the beneficiaries are considered, contributing to the success and sustainability of the program.
- **Regular Review:** Conduct periodic reviews of MSP rates, considering market trends, inflation, and the specific needs of gatherers and farmers. Regular reviews help to adjust MSP rates in response to changing economic conditions, ensuring that the scheme remains relevant and effective.
- **Integrated Policies:** Coordinate with related policies in forestry management, tribal welfare, and economic development to create a holistic approach. Integrated policies can address the multifaceted challenges faced by MFP collectors, promoting a comprehensive and sustainable approach to their well-being and forest resource management.

National Council for Transgender Persons

Context

- The National Council for Transgender Persons (NCTP) held a meeting to address the multifaceted challenges encountered by transgender individuals, covering crucial issues such as education, life with dignity, health support, livelihood opportunities, and skill enhancement.

Details

- Specific concerns raised during the meeting included the necessity for unisex toilets, the

establishment of shelter homes, distribution of Ayushman Cards.

- Development of a transgender portal to streamline access to resources and support services, facilitating ease of navigation for transgender individuals across various aspects of their lives.

Formation

- Constituted under the Transgender Persons (Protection of Rights) Act, 2019.

Purpose

- Advises the Central Government on policies, programs, and legislation related to transgender persons.
- Works to redress issues like societal stigma, discrimination, and lack of opportunities facing transgender communities.
- Monitors and evaluates the impact of policies and schemes developed for transgender welfare.
- Facilitates and coordinates with State Governments/Union Territories and other stakeholders to ensure the protection of the rights and interests of transgender persons.

Composition

- **Chairperson:** The Union Minister of Social Justice and Empowerment (Ex-officio)
- **Vice-Chairperson:** The Minister of State for Social Justice and Empowerment (Ex-officio)
- **Members:** 5 representatives of the transgender community, 5 experts from relevant NGOs, and Joint Secretary-level representatives from various central ministries.

Key Functions

- **Policy Formulation:** Advising on and drafting policies designed for the welfare and development of transgender communities.
- **Monitoring and Evaluation:** Overseeing the implementation of policies and programs, and ensuring their reach and effectiveness.
- **Advocacy:** Addressing discrimination, violence, harassment, and other challenges faced by transgender persons. Raising awareness on transgender rights and issues.
- **Redressal and Facilitation:** Working on grievance redressal mechanisms for

transgender individuals. Liaising with states and organizations to ensure transgender persons are included in various development initiatives and welfare schemes.

Conclusion

- The National Council for Transgender Persons (NCTP) serves as a crucial body for advocating for and protecting the rights of transgender individuals in India. By advising the government, addressing grievances, and coordinating efforts, the NCTP strives for inclusivity and equal opportunities for the transgender community.

Atal Vayo Abhyuday Yojana

Context

- The Ministry of Social Justice and Empowerment has actively contributed to the welfare of senior citizens through the implementation of various initiatives under the Atal Vayo Abhyuday Yojana (AVYAY).

Details

Former Name

- National Action Plan for Senior Citizens (NAPSrc) was revamped and renamed as Atal Vayo Abhyuday Yojana in 2021.

Objectives

- Enhance the standard of living for Senior Citizens by providing basic amenities such as shelter, food, medical care, and entertainment opportunities.
- Recognize the invaluable contribution made by the elderly to society.
- Ensure well-being and social inclusion by empowering and uplifting senior citizens.
- Encourage active participation and inclusion in all aspects of life.

Approach

Assistance provided to Implementing Agencies for:

- Fulfilling the basic needs of Senior Citizens, including food, shelter, and healthcare for the destitute elderly.
- Building and strengthening intergenerational relationships, particularly between children/youth and Senior Citizens, through

Regional Resource and Training Centres (RRTCs).

- Encouraging Active and Productive Ageing through RRTCs.
- Providing Institutional and Non-Institutional Care/Services to Senior Citizens.
- Research, Advocacy, and Awareness building programs in the field of Ageing through RRTCs.
- Any other programs in the best interest of Senior Citizens.

Nodal Agency

- Ministry of Social Justice and Empowerment

Implementing Agencies

- State/UT Governments, Panchayati Raj Institutions, local bodies, eligible Non-Governmental/Voluntary Organizations

Key Initiatives under the AVYAY Scheme

- **Integrated Programme for Senior Citizens (IPSc):** Grant-in-aid is provided to Non-Governmental/Voluntary Organizations for the operation and maintenance of Senior Citizens' Homes, continuous care homes, etc. Facilities such as shelter, nutrition, medicare, and entertainment are provided free of cost to indigent senior citizens.
- **State Action Plan for Senior Citizens (SAPSc):** Grant in aid is released to States/UTs for creating a pool of trained Geriatric Caregivers. Special drives for

cataract surgeries for senior citizens and state-specific activities for the welfare of indigent senior citizens are carried out.

- **Rashtriya Vayoshri Yojana (RVY):** Aims to provide assisted living devices to senior citizens suffering from age-related disabilities or infirmities. Eligible senior citizens are those in the Below Poverty Line (BPL) category or with a monthly income up to Rs. 15,000.
- **Senior-care Ageing Growth Engine (SAGE):** Identifies and encourages innovative start-ups to develop products, processes, and services for the welfare of the elderly. Selected start-ups receive equity support of up to Rs. 1 Crore per project, with the total government equity not exceeding 49%.
- **Geriatric Caregivers Training:** Introduced to bridge the gap in supply and demand for geriatric caregivers. Aims to create a cadre of professional caregivers in the field of geriatrics.

Conclusion

- Atal Vayo Abhyuday Yojana (AVYAY) underscores the government's commitment to enhancing the well-being of senior citizens, recognizing their invaluable contributions and ensuring active inclusion in society. Through its integrated programs, AVYAY stands as a testament to promoting a dignified and fulfilling life for India's elderly population.

6.5 SHORT ARTICLES



SMILE Scheme

APTI PLUS

- The SMILE scheme, launched by the Union Ministry of Social Justice and Empowerment, merges existing schemes for beggars and transgenders, with a primary focus on rehabilitation and support for marginalized individuals.
- The sub scheme under SMILE addresses the rehabilitation of beggars, utilizing existing shelter homes or establishing new ones, emphasizing medical care, counselling, education, skill development, and economic linkages.
- Approximately 60,000 of the poorest individuals are expected to benefit, promoting a life of dignity through comprehensive support and intervention.
- It is implemented with the collaboration of State/UT Governments, local bodies, voluntary organizations, and institutions to ensure effective outreach and support.



SWATI Portal

- A Technology and Innovation (SWATI) Portal was launched by the National Institute of Plant Genome Research (NIPGR) in collaboration with the Inter-Academy Panel (IAP) of the Indian Science Academies.
- It offers a searchable database, allowing contributions and nominations, and a resource centre providing funding, career development, mentorship, and educational opportunities for women scientists.
- It encourages and inspires more women to pursue careers in Science, Technology, Engineering, Mathematics, and Medicine (STEMM) by presenting successful women scientists as role models.
- It offers a range of resources, opportunities, and support mechanisms aimed at empowering and facilitating the success of women scientists in their STEMM careers.

6.6 1 MAINS & 5 MCQs

Q1. *ASHA workers play a crucial role in India's healthcare system, particularly in rural areas. However, they often face challenges like low wages, heavy workloads, and limited resources. How can policymakers effectively address these issues while ensuring ASHA workers remain motivated and deliver quality healthcare services?*

Answer Structure:

- **Introduction:** Briefly highlight the crucial role of ASHA workers in bridging the gap between rural communities and primary healthcare services.
- **Challenges Faced by ASHA Workers:** Outline the key challenges: low wages, heavy workloads, limited resources (medicines, supplies, training). Briefly explain how each challenge hinders their effectiveness.
- **Policy Measures for Improvement:**
 - **Improve Compensation:** Advocate for fair wages that reflect their workload and responsibilities. Explore incentive-based schemes for exceeding performance targets.
 - **Workload Management:** Streamline reporting requirements to minimize administrative burden. Consider increasing the number of ASHA workers to distribute responsibilities.
 - **Enhanced Resources:** Ensure adequate provision of essential medicines and basic diagnostic tools. Regular training programs to upgrade their skills and knowledge. Improved access to technology for better communication and data management.
- **Maintaining Motivation:**
 - **Recognition and Appreciation:** Public recognition of their contributions through awards and media coverage. Opportunities for career progression through higher qualifications or specialized roles.
 - **Support System:** Create grievance redressal mechanisms for addressing their concerns. Provide mental health and wellbeing support programs.
 - **Improved Working Conditions:** Invest in accident and health insurance coverage for ASHA workers. Provide reliable transportation facilities for village visits.
- **Conclusion:** Emphasize how addressing these issues will enhance ASHA workers' motivation and service quality. Briefly mention the positive impact on rural healthcare outcomes.

Use relevant data and statistics to support your arguments (e.g., percentage of healthcare delivered through ASHA workers). Mention specific government initiatives related to ASHA workers and suggest improvements.

Q2. *In the context of Gender Budgeting, what does the term 'gender-responsive budget' refer to?*

A) A budget that caters exclusively to women's needs

- B) A budget that considers the impact on different genders
- C) A budget solely managed by women
- D) A budget aimed at reducing gender-based violence

Q3. The LABHA Yojana, launched by the Odisha government, primarily focuses on:

- A) Financial support for urban development
- B) Promoting agricultural exports in the state
- C) Empowering tribal populations through MSP for Minor Forest Produce (MFP)
- D) Enhancing healthcare services in rural areas

Q4. What is the primary objective of the SMILE scheme launched by the Union Ministry of Social Justice and Empowerment?

- A) Providing financial incentives to encourage begging as a profession.
- B) Offering comprehensive rehabilitation and support for marginalized individuals.
- C) Creating exclusive employment opportunities for transgenders.
- D) Focusing solely on the criminalization of begging.

Q5. What is the primary purpose of the SWATI Portal launched by the National Institute of Plant Genome Research (NIPGR)?

- A) To promote awareness about plant genome research
- B) To facilitate funding for men and women in STEM fields
- C) To provide a searchable database for women scientists
- D) To encourage collaboration between different science academies

Q6. How can menstrual leave policies contribute to gender equality?

- A) By addressing specific health needs and promoting workplace inclusivity.
- B) By minimizing the overall leave entitlements for female employees.
- C) By emphasizing gender-based differences in health and productivity.
- D) By excluding male employees from availing similar health-related benefits.

ANSWER: 2) B, 3) C, 4) B, 5) C, 6) A

7. SCIENCE & TECHNOLOGY AND HEALTH

8.1 SUNRISE TECHNOLOGIES

Context

- In the Interim Budget 2024-25 presentation, the finance minister revealed a plan to create a corpus of Rs 1 lakh crore for sunrise technologies.

Details

- Finance Minister Nirmala Sitharaman announced that the government of India will establish a ₹1 trillion corpus to incentivize innovation and research on sunrise domains. The fund will have a provision of 50-year interest-free loans and will provide long-term financing and refinancing for long tenures with low or zero interest rates, Sitharaman said in her budget speech.

About Sunrise Technologies:

Sunrise technologies represent a category of innovations with significant potential impact on various sectors, driving economic growth and societal development. These technologies are characterized by their novelty, rapid growth, and future potential.

Government Initiative to Encourage Investment

- **Financial Boost:** The government aims to encourage personal investment in sunrise technologies by offering a fifty-year interest-free loan corpus. This initiative is designed to provide financial support and incentivize innovation and research in emerging technology fields.
- **Long-term Financing:** Emphasizing the importance of research and innovation, the Finance Minister proposes long-term financing with extended tenors and low or zero interest rates. Such measures aim to encourage the private sector to focus on research and development in sunrise domains.

Transition towards Innovation

- **Shift in Focus:** India's growth trajectory has evolved from the traditional "Jai Jawan Jai Kisan" to "Jai Jawan Jai Kisan Jai Vigyan and Jai Anusandhan," highlighting the growing significance of innovation in driving development.

- A 2023 report by McKinsey Global Institute estimates that renewable energy investments will reach \$1.7 trillion annually by 2030, showcasing the rapid growth of this sunrise sector.
- The Indian government has set an ambitious target of achieving 50% renewable energy capacity by 2030, highlighting the immense future potential of renewable energy in the country.
- Indian startups like Blueair Mobility and Ather Energy are developing innovative electric vehicle technologies, demonstrating the country's commitment to innovation in this sunrise sector.

Characteristics of Sunrise Technologies

- **Rapid Growth:** These technologies exhibit high growth rates, with significant increases in revenue, market share, and investment.
 - **For example:** Tesla, the electric vehicle company, saw its stock price increase by over 1,000% between 2010 and 2021, highlighting the rapid growth potential of sunrise industries.
- **Future Potential:** They are anticipated to have a major impact on the economy and society in the long term, driving innovation and growth.
 - **For example:** Artificial intelligence (AI) is projected to add \$15.7 trillion to the global economy by 2030, according to a PwC report, demonstrating its transformative potential across various sectors.

- **Innovation:** Sunrise technologies often leverage existing technology or disruptive business models to bring about transformative changes.
 - **For example:** **CRISPR gene editing technology** holds immense potential for treating genetic diseases, showcasing the innovative nature of sunrise technologies and their potential to revolutionize healthcare.
- **Uncertainty:** Due to their early stage, the future success and long-term trajectory of sunrise technologies may be uncertain.
 - **For example:** The long-term success of quantum computing, despite its potential for revolutionary advancements, remains uncertain due to technical challenges.

Examples of Potential Sunrise Technologies

- **Renewable Energy:** Solar, wind, and bioenergy hold promise for sustainable development and energy security.
- **Biotechnology:** **For example** Gene editing, personalized medicine, and bioprinting hold immense potential for healthcare advancements.
- **Artificial Intelligence and Machine Learning:** These technologies have the potential to revolutionize various sectors, including healthcare, agriculture, and finance.
- **Electric Vehicles and Battery Technology:** EVs and advancements in battery technology can significantly reduce emissions and promote sustainable transportation.
- **Blockchain:** Secure and transparent transactions across industries, including finance and supply chain management.
- **Internet of Things (IoT):** Connecting devices and collecting data for improved automation and efficiency.
- **Vertical Farming:** Sustainable and efficient food production in urban environments.
- **Robotics and Automation:** Automation can improve productivity, precision, and safety in manufacturing and healthcare. Such as, **Augmented Reality (AR) and Virtual Reality (VR)**

Addressing Challenges

- **Infrastructure:** Investments in research centers and infrastructure are crucial to support the growth of sunrise technologies. **Such as, India's National Biopharma Mission** aims to strengthen infrastructure for biotechnology research and development.
- **Skilled Workforce:** Addressing the shortage of skilled professionals through education and training programs is essential. The government's **Skill India initiative focuses on training programs** for sunrise sectors like AI and robotics.
- **Funding and Investment:** Ensuring access to finance and investment opportunities is necessary to fuel innovation and expansion. **For example: India's Angel Tax reforms** aim to encourage investments in startups, including those working on sunrise technologies.
- **Regulatory Framework:** Streamlining regulations can facilitate ease of doing business and encourage technological adoption. **For example:** The



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government is **developing sandbox frameworks** for testing new technologies like blockchain and drones, facilitating innovation within a regulatory framework.

Future Outlook and Adaptation

- **India's Startup India and Digital India initiatives** promote innovation and technological adoption, positioning the country to benefit from sunrise technologies.
- **Continuous research and development, strategic collaborations**, and adapting to emerging trends are crucial for India to fully harness the potential of these technologies and drive economic growth and development.

8.2 HIGH ALTITUDE PSEUDO-SATELLITE

Context

- The successful test flight of India's solar-powered "pseudo satellite," known as the High-Altitude Pseudo Satellite (HAPS), marks a significant advancement in the country's aerospace capabilities.



About High-Altitude Pseudo Satellite (HAPS)

'HAPS is an unmanned aerial vehicle (UAV) designed to operate at extremely high altitudes, ranging from 18 to 20 kilometers above the ground. It is powered by solar energy, allowing it to remain airborne for extended periods, potentially months or even years, akin to the functionality of a satellite.

The HAPS project is led by the National Aerospace Laboratories (NAL) in Bengaluru, India.

Recent Developments

- **Successful Test Flight:** In November 2022, the National Aerospace Laboratories (NAL) successfully test-flew a 5-meter HAPS prototype, marking a significant step forward for India's HAPS program.
- **Industry Collaboration:** HAL, a state-owned aerospace company, has partnered with private startups to develop and manufacture HAPS in India. This collaboration aims to accelerate development and leverage commercial expertise.
- **Government Support:** The Indian government has allocated funding for the HAPS program, recognizing its strategic and economic potential.
- **Enhanced Connectivity:** Operating closer to the ground than satellites, HAPS can provide wider coverage and higher bandwidth internet access, bridging the digital divide in remote areas and expanding communication infrastructure.
- **Strategic Advantages:** Militaries across the globe are exploring HAPS for intelligence gathering, communication relay, and potentially even weaponization, raising concerns about potential escalation and militarization of the stratosphere.

Unveiling the Potential:

- **Continuous Monitoring:** HAPS, operating in the stratosphere for months on end, offer continuous monitoring capabilities far exceeding traditional aircrafts. This is advantageous for applications like border security, disaster management, and environmental monitoring.
- **Technical Constraints:** Developing and maintaining long-endurance, solar-powered aircraft operating at high altitudes faces technological hurdles.
- **Regulatory Uncharted Territory:** Regulations for HAPS operation, including air traffic control protocols and collision avoidance, are still evolving, necessitating international cooperation.

- **Environmental Concerns:** Potential impacts on wildlife migration patterns, high-altitude weather systems, and potential light pollution require careful assessment and mitigation strategies.

Ethical Considerations

- **Data Privacy and Surveillance:** Continuous monitoring capabilities raise concerns about potential misuse of data and infringement on privacy, necessitating robust data protection frameworks.
- **Weaponization and Militarization:** The use of HAPS for offensive purposes can exacerbate geopolitical tensions and introduce new risks to civilian populations.
- **Accessibility and Equity:** Ensuring equitable access to the benefits of HAPS technology while addressing potential digital divides requires careful planning and international cooperation.

Future Potential

- **Operational Deployment:** The successful test flight paves the way for larger-scale development and deployment of HAPS for various applications in India.

- **Border Security Enhancement:** Operational HAPS can provide real-time surveillance along India's borders, strengthening security and deterring infiltration attempts.
- **Improved Disaster Management:** HAPS can be used for real-time monitoring of natural disasters like floods and cyclones, enabling timely response and mitigation efforts.
- **Global Leadership:** India has the potential to become a global leader in HAPS technology, promoting its development and applications worldwide.

Conclusion

- HAPS technology holds immense potential for India in various areas, particularly strategic surveillance, improved communication, and scientific applications. With recent successful test flights, industry collaborations, and government support, India is well-positioned to become a leader in HAPS development and reap its benefits for national security, economic growth, and scientific advancement. However, addressing technological challenges, establishing regulations, and ensuring cost-effectiveness are key considerations for realizing this potential.

8.3 SURROGACY (REGULATION) ACT, 2021

Context

- The Delhi High Court on Wednesday sought the Centre's response within four weeks on a petition by a couple challenging the law that allows only women aged between 23 and 50 to go for surrogacy.

About Surrogacy (Regulation) Act, 2021

'The Surrogacy (Regulation) Act, 2021', is a significant piece of legislation in India that governs the practice of surrogacy. It was enacted in January 2022, replacing the previous Surrogacy and Assisted Reproductive Technology (ART) Bill, 2018.

Main provisions

- **Permits only altruistic surrogacy:** The Act prohibits commercial surrogacy, meaning no payment or other benefits can be given to the surrogate mother. **Surrogacy can only be undertaken on an altruistic basis**, with close

relatives (sister, sister-in-law, daughter, daughter-in-law, niece) acting as surrogates.

- **Eligibility criteria:** Only married, infertile Indian couples who have been married **for at least five years and are between 35 and 45 years old can avail of surrogacy**. The

surrogate mother must be a married woman between 25 and 40 years old, who has previously given birth to a healthy child.

- **Registration and regulation:** Strict regulations are in place for surrogacy clinics, ART banks, and surrogacy agreements. All stakeholders must be registered with the appropriate authorities.
- **Medical board and surrogacy committee:** A State Surrogacy Medical Board and a State Surrogacy Committee are established to assess the eligibility of couples and surrogates, approve surrogacy agreements, and ensure ethical practices.
- **Prohibitions:** The Act prohibits commercial surrogacy, sex selection, abandoning the child born through surrogacy, exploiting surrogates, and engaging in unethical practices.
- **Penalties:** Violations of the Act can lead to imprisonment of up to 10 years and a fine of up to Rs 10 lakh.

Arguments for the Act

- **Protects surrogate mothers:** By prohibiting commercial surrogacy and setting strict regulations, the Act aims to prevent exploitation of surrogate mothers and ensure their safety and well-being.
- **Reduces risk of commercialization:** Eliminating commercial surrogacy is seen as a way to prevent it from becoming a lucrative business that could exploit vulnerable women.
- **Protects children:** The Act aims to protect the rights and well-being of children born through surrogacy by ensuring they are not abandoned and their identity is known.

Arguments against the Act

- **Limits access to surrogacy:** The restrictive eligibility criteria and limited pool of eligible surrogates may make it difficult for many couples, including single individuals and same-sex couples, to access surrogacy.
- **Encourages black market:** Strict regulations might push some couples towards

unregulated and potentially unsafe black market surrogacy options.

- **Discriminates against single and same-sex couples:** The Act excludes single individuals and same-sex couples from accessing surrogacy, which is seen as discriminatory.

Suggestions for Improvement

- **Expand Eligibility:** Currently, the Act only allows married couples with proven infertility to seek surrogacy. Consider including single individuals, same-sex couples, and couples facing other challenges like recurrent pregnancy loss.
- **Address LGBTQ+ Inclusion:** The Act excludes LGBTQ+ individuals from accessing surrogacy. This raises concerns about equality and access to parenthood. Consider amendments to allow LGBTQ+ individuals to pursue surrogacy under the Act.
- **Address Commercial Surrogacy Concerns:** While ethical concerns surrounding commercial surrogacy are valid, a complete ban could disadvantage intended parents relying on financial support. Consider exploring regulated commercial surrogacy models with robust safeguards to prevent exploitation.
- **Strengthen Anti-Exploitation Measures:** Implement stricter regulations and monitoring mechanisms to prevent exploitation of surrogate mothers, including informed consent procedures, fair compensation, and post-partum support.
- **Address Mental Health Support:** Consider providing mental health support and counseling services for both surrogates and intended parents before, during, and after the surrogacy process.
- **Review and Update:** Establish a regular review process to assess the Act's effectiveness and make necessary amendments based on evolving social and technological contexts.

Conclusion

- The Surrogacy (Regulation) Act, 2021 attempts to regulate surrogacy in India with the aim of preventing exploitation and ensuring ethical practice. However, the Act faces criticism for excluding certain groups

and potentially hindering access to parenthood for those who need it.

- By incorporating the suggested improvements, the Act can become more inclusive, ethical, and responsive to the diverse needs of individuals seeking surrogacy in India.

8.4 PRIVATE INVESTMENTS IN INDIA'S NUCLEAR ENERGY

Context

- India will invite private companies to invest about \$26 billion in its nuclear energy sector to increase the amount of electricity from sources that do not produce carbon dioxide emissions.

India to seek \$26 bn private investment in nuclear power sector

India is set to revolutionise its nuclear energy sector by inviting private companies to invest approximately USD 26 billion, marking a significant shift in its energy policy.

- The Indian government has sought **\$26 billion (around Rs. 2.16 trillion) in private investment** for its nuclear power sector.
- This marks the first time India has pursued private investment in this domain.
- Negotiations are underway with leading firms like Reliance Industries, Tata Power, Adani Power, and Vedanta Ltd., with each potentially investing **around Rs 440 billion (\$5.3 billion)**.

Rationale for Private Investment

- **Boosting Nuclear Power Capacity:** India aims to build **11,000 MW of new nuclear power generation capacity by 2040**. Private investments can accelerate this expansion and bridge the funding gap.
- **Clean Energy Goals:** Nuclear power offers a reliable, low-carbon source of electricity, crucial for achieving India's goal of having **50% of its installed electric generation capacity from non-fossil fuels by 2030**. Currently, nuclear power only contributes about 2% of India's electricity generation.
- **Technological Advancements:** Investing in next-generation nuclear technologies can enhance safety, efficiency, and public acceptance of nuclear power.

- **Safety Concerns:** Addressing public concerns about nuclear safety and waste management remains a priority.
- **Cost Competitiveness:** Ensuring the long-term economic viability of nuclear power compared to other energy sources is essential.

Potential Benefits

- **Increased Investment:** Private participation can provide much-needed capital for infrastructure development and technological advancements.
- **Innovation:** Collaboration with private companies can foster innovation in nuclear technology and reactor design.
- **Job Creation:** Investments can lead to job creation in the nuclear energy sector and related industries.

Challenges and Considerations

- **Regulatory Framework:** Establishing a clear and efficient regulatory framework for private participation in the nuclear sector is crucial.

Opportunities for Nuclear Power Expansion in India

Increasing Nuclear Power Share

- India aims to elevate nuclear power's contribution from 3% to 9-10% of its energy mix, signifying a significant growth opportunity in the sector.

Foreign and Private Investments

- The nuclear industry in India presents lucrative prospects for foreign and private companies, particularly in non-nuclear components of power plants, construction, and service sectors, paving the way for collaborations and investments.

Small Modular Reactors (SMRs)

- The deployment of Small Modular Reactors (SMRs) offers a promising avenue for cost reduction and accelerated construction timelines. Collaborations for technology sharing and partnerships could further enhance this potential.

Supporting Green Initiatives

- Nuclear energy holds the potential to support the production of green hydrogen and aid in the decarbonization of the transportation sector. It can serve as a clean power source for electric vehicles and hydrogen fuel cells, aligning with India's green energy objectives.

Crucial Role in Energy Transition

- With the phase-out of outdated coal plants, nuclear power is set to play a pivotal role in meeting India's escalating energy demands while advancing towards its clean energy targets.

Conclusion

- Opening up India's nuclear energy sector to private investment holds significant promise for boosting clean energy generation and achieving India's climate goals. However, addressing regulatory hurdles, safety concerns, and cost competitiveness will be essential for the success of this initiative.

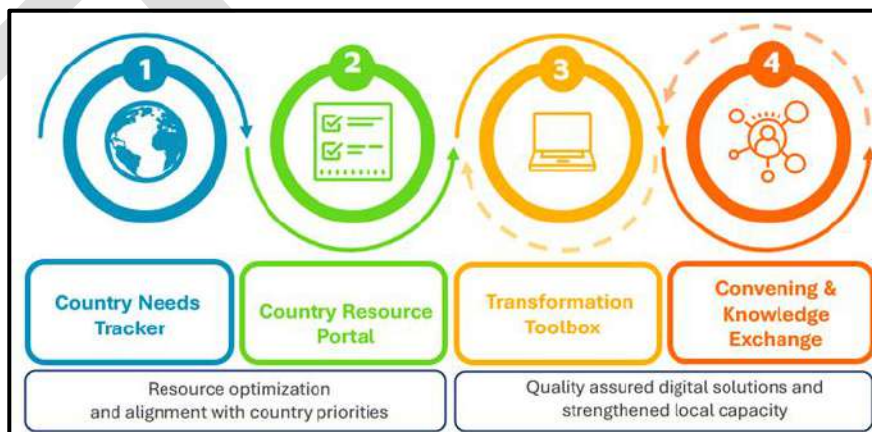
8.4 PRIVATE INVESTMENTS IN INDIA'S NUCLEAR ENERGY

Context

- The World Health Organization (WHO) has launched the Global Initiative on Digital Health (GIDH), a platform aimed at sharing knowledge and digital products among countries.

About the Global Initiative on Digital Health (GIDH)

- WHO-managed network of stakeholders focused on implementing the Global Strategy on Digital Health 2020-2025 and promoting digital health transformation globally.



Origin and Purpose

- Launched in August 2023:** A joint initiative by the World Health Organization (WHO) and the Government of India during India's G20 presidency.
- Network of Stakeholders:** GIDH operates as a WHO-managed network, bringing together various stakeholders like governments, international organizations, private sector companies, and civil society.

- **Supporting Implementation:** Its primary goal is to facilitate the implementation of the **Global Strategy on Digital Health 2020-2025**. This strategy outlines a comprehensive framework for leveraging digital technologies to improve health systems globally.

Focus Areas

- **Strengthening Collaboration:** GIDH aims to strengthen collaboration among existing partners and networks in the digital health field.
- **Capacity Building:** Assisting member states in enhancing their capacity to implement digital health solutions.
- **Knowledge Sharing:** Facilitating the exchange of best practices, knowledge, and tools for digital health transformation.
- **Resource Mobilization:** Encouraging increased investment and resource allocation toward digital health initiatives.

Benefits and Significance

- **Improved Health Outcomes:** Effective implementation of digital health solutions can improve access to healthcare services, promote preventive care, and enhance disease management.
- **Equity and Accessibility:** GIDH emphasizes bridging the digital divide and ensuring equitable access to digital health technologies for all populations, especially in low- and middle-income countries.
- **Strengthened Health Systems:** Digital health can contribute to strengthening health systems by improving efficiency, data management, and service delivery.

Conclusion

- Overall, the **Global Initiative on Digital Health** presents a promising opportunity to **accelerate progress in digital health transformation on a global scale**. By fostering collaboration, knowledge sharing, and resource mobilization, GIDH can contribute to improved health outcomes for all.



8.5 SHORT ARTICLES

Neuralink Implants

Context

- Recently, Elon Musk made a recent announcement concerning the successful implantation of a Neuralink device in a human subject.

Details:

- The first human patient received an implant from brain-chip startup Neuralink on Sunday and is recovering well, the company's billionaire founder Elon Musk said.
- Initial results show promising neuron spike detection," Musk said in a post on the social media platform X on Monday.

About Brain-Computer Interface:

A Brain-Computer Interface (BCI) is a technology that enables direct communication between the brain and external devices, such as computers or prosthetics, without using traditional neuromuscular pathways like nerves and muscles.

Potential Applications of Brain-Computer Interface:

Medical Treatments

- Monitoring and treating neurological disorders such as epilepsy, Parkinson's disease, and neurodegenerative disorders by directly interfacing with the brain.

Assistive Technology

- Enabling individuals with paralysis or motor impairments to control devices like prosthetics, wheelchairs, or robotic limbs using their thoughts.

Mental Health Monitoring

- Providing real-time data for monitoring and managing mental health conditions such as depression or anxiety.

Virtual and Augmented Reality

- Enhancing virtual and augmented reality experiences by allowing users to interact with digital environments using their thoughts.

Neurological Research

- Advancing understanding of brain function and disorders through real-time brain activity monitoring and analysis.

Communication Devices

- Facilitating communication for individuals with severe disabilities who cannot use traditional methods.

Brain-Controlled Prosthetics

- Allowing amputees or individuals with limb disabilities to control prosthetic limbs directly with their thoughts.

Neurofeedback Therapy

- Using real-time brain activity feedback to train individuals to regulate brain functions and treat various neurological conditions.

Consumer Electronics

- Enabling hands-free control of electronic devices such as smartphones, computers, or home appliances.

POEM-3

Context

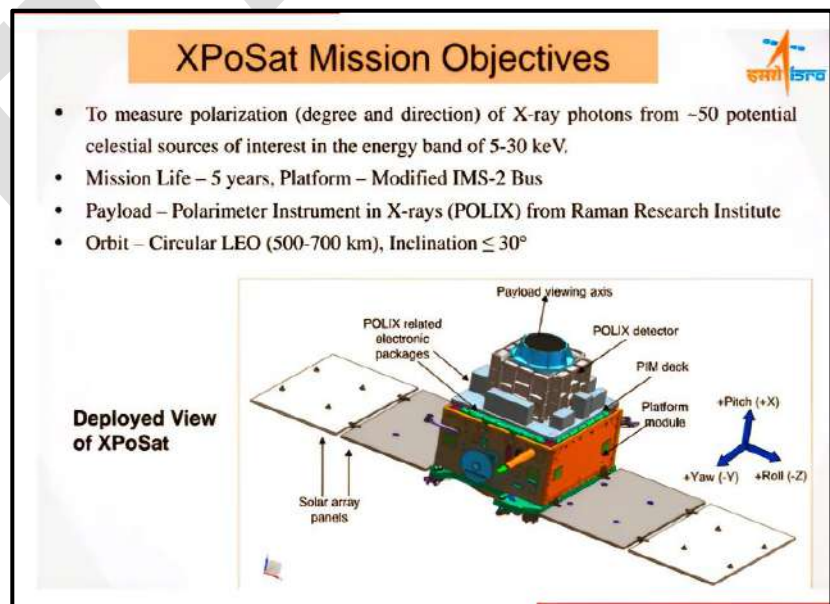
- ISRO said POEM-3 flew with nine payloads from Vikram Sarabhai Space Centre, Physical Research Laboratory, academia, and space start-ups.

About POEM3:

- On January 1, 2024, the Indian Space Research Organisation (ISRO) achieved a historic breakthrough by successfully testing a 100 W class Polymer Electrolyte Membrane Fuel Cell based Power System (FCPS) on its orbital platform, POEM3. This marked a pivotal moment in the evaluation of fuel cell technology for future space missions.

The objective of the Experiment

- The primary goal of the experiment was to assess the operation of Polymer Electrolyte Membrane Fuel cells in a demanding space environment. The mission aimed to collect crucial data to inform the design of power systems for upcoming space endeavors.



Power Generation in Space

- During the short-duration test on **POEM**, the **FCPS generated 180 W of power** by utilizing hydrogen and oxygen gases stored in high-pressure vessels.
- This successful test provided valuable data on the performance of various static and dynamic systems integrated into the power system.

Hydrogen Fuel Cells: A Game-Changer

- Hydrogen fuel cells, employed in the FCPS, have the unique ability to produce electricity directly from hydrogen and oxygen gases, **operating on electrochemical principles similar to batteries**.
- This makes them highly efficient, emission-free, and ideal for space missions.

Societal Applications of Fuel Cells

- Beyond space exploration, fuel cells hold significant potential for societal applications, particularly in replacing engines in various vehicles, offering comparable range and fuel recharge times to conventional engines.

The FCPS and India's Space Station

- The FCPS payload's successful test in the **POEM-3 experiment carries implications for India's proposed space station, expected to be operational by 2035**.
- This power system aligns perfectly with the essential requirements of a space station, capable of producing both electricity and pure water.

Mission Accomplishments: XPoSat and POEM-3

- The PSLV-C58 mission's success included the **X-ray Polarimeter Satellite (XPoSat) mission and the POEM-3 experiment**.
- The latter aimed to fulfill the objectives of ten other payloads developed by start-ups, educational institutions, and various ISRO centers, including the FCPS.

Digital Detox

Context

- The Government of Karnataka, in collaboration with the All India Game Developers Forum (AIGDF), is set to launch a Digital Detox initiative, concentrating on gaming and social media.

About Digital Detox Initiative:

About

- Plans of the Karnataka Government

Description

- A Digital Detox initiative encourages people to cut back on using digital devices like smartphones, computers, tablets, and social media platforms through structured programs or campaigns.

Aim

- Digital Detox aims to encourage mindfulness, lessen screen time, address digital addiction, and foster healthier habits with technology.

Activities Involved

- It often involves activities such as unplugging from devices, engaging in offline hobbies and activities, spending time in nature, and fostering face-to-face social interactions.

Plans of the Karnataka Government

Collaboration

- The Karnataka government will collaborate with AIGDF and the National Institute of Mental Health and Neuro Sciences (NIMHANS) to promote awareness about mindful technology.

Establishment of Centers

- Karnataka will establish digital detox centers statewide. These centers will offer personalized guidance from trained professionals to individuals seeking assistance in managing their technology use.

Kerr Black Hole

Context

- Rotating black holes have an ergosphere outside their event horizon, where matter and energy can be extracted.

About Kerr black holes:

- Kerr black holes are a type of black hole characterized by their angular momentum or rotation. They are formed from the gravitational collapse of massive stars, leaving behind a dense core after a supernova explosion.

Features of Kerr Black Holes

Ergosphere

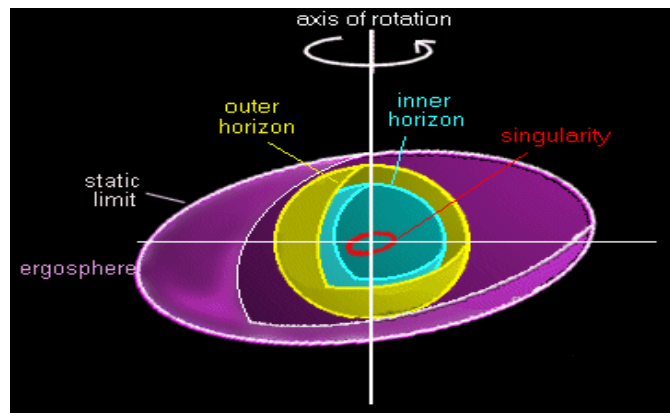
- Kerr black holes possess an ergosphere, a region of spacetime surrounding the black hole but outside its outer event horizon.
- The ergosphere is situated inside the outer event horizon and outside the inner event horizon, forming the space between the two horizons.

Properties of the Ergosphere

- Spacetime Dragging:** Spacetime within the ergosphere is dragged along with the rotation of the black hole, creating a region where objects cannot remain stationary but are forced to rotate with the black hole.
- Escape Potential:** Despite the strong gravitational pull of the black hole, objects within the ergosphere can still potentially escape if they possess sufficient velocity.

Scientific Implications

- Energy Extraction:** The presence of the ergosphere provides a mechanism for extracting rotational energy from the black hole.
- Particle Splitting:** Objects or particles entering the ergosphere can split into two parts, with one part falling into the black hole and the other escaping with increased energy due to the black hole's rotation. This process enables the extraction of rotational energy from the black hole itself.



Cervical Cancer

Context

- The global cancer burden increased by 20 million new cases in 2022, with lung cancer being the most common, followed by breast, colorectal, prostate, and stomach cancers.

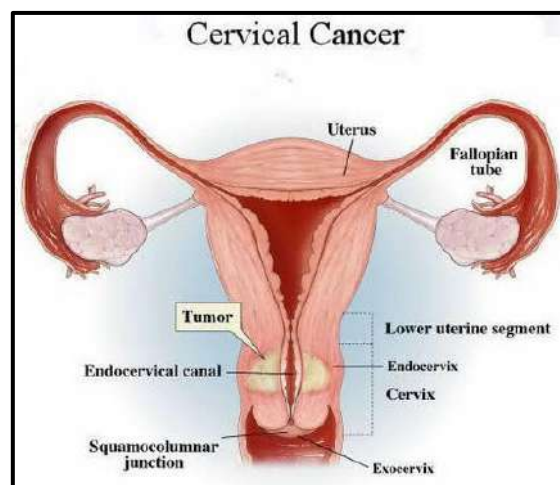
About Cervical Cancer:

Definition

- Cervical cancer is a type of cancer that occurs in the cells of the cervix, the lower part of the uterus that connects to the vagina.

Causes

- Human papillomavirus (HPV) infection**, particularly with high-risk strains such as HPV-16 and HPV-18, is the primary cause of cervical cancer. Other risk factors include smoking, weak immune system, multiple sexual



partners, and early sexual activity.

Symptoms

- Early stages may be asymptomatic, but as the cancer progresses, symptoms may include abnormal vaginal bleeding, pelvic pain, pain during intercourse, and abnormal vaginal discharge.

Diagnosis

- Diagnosis often involves a Pap smear (Pap test) to detect abnormal cells in the cervix, followed by further testing such as colposcopy, biopsy, HPV testing, and imaging studies (MRI, CT scans) to confirm the diagnosis and determine the extent of the cancer.

Treatment

- Treatment options depend on the stage of the cancer and may include surgery (such as hysterectomy), radiation therapy, chemotherapy, targeted therapy, and immunotherapy.

Prevention

- HPV vaccination for adolescents and young adults, regular Pap smears for early detection of abnormal cells, practicing safe sex, avoiding smoking, and maintaining a healthy lifestyle can help prevent cervical cancer.

Prognosis

- Prognosis varies depending on the stage of the cancer at diagnosis. Early-stage cervical cancer has a high cure rate, while advanced-stage cancer may have a poorer prognosis.

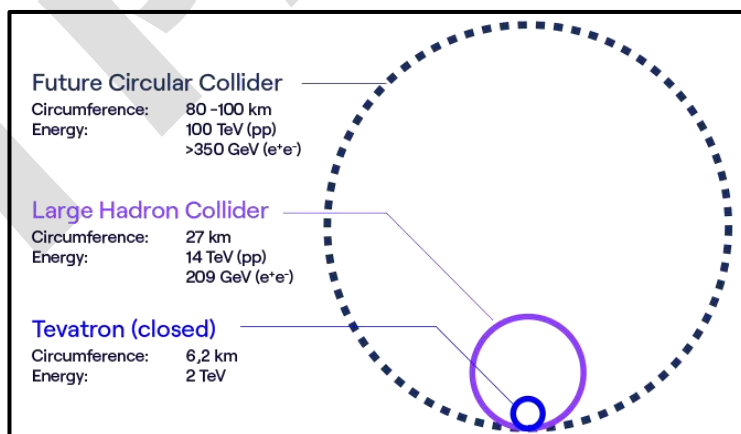
Future Circular Collider

Context

- CERN is pushing its plan to build the Future Circular Collider, a particle accelerator that will dwarf the Large Hadron Collider.

About Future Circular Collider:

- The Future Circular Collider (FCC) is a particle accelerator that is being designed to host the next generation of particle colliders. The FCC is expected to be completed in 2035 and will have a significantly higher energy than previous colliders.



Key features of Future Circular Collider:

Energy Levels

- The FCC aims for collision energies of 100 TeV (proton-proton) and 6.5 TeV (electron-positron), far surpassing the current record of 13.6 TeV by the LHC.

Collider Options

- Two main options are considered: FCC-hh, a proton-proton collider for high energies, and FCC-ee, an electron-positron collider for precise studies.

Advanced Technologies

- Cutting-edge advancements are needed in superconducting magnets, particle detectors, and computing power to support the FCC's operations at higher energies.

Global Collaboration

- The FCC is an international effort involving scientists worldwide, ensuring diverse expertise, shared resources, and collaboration for the project's success.

Long-Term Vision

- Construction is planned to start in the mid-2040s, with operation potentially beginning in the 2050s, requiring sustained commitment and collaboration.

Hypervelocity expansion tunnel test facility

Context

- The Indian Institute of Technology Kanpur (IITK) has achieved a significant milestone by establishing and testing India's first Hypervelocity Expansion Tunnel Test Facility, named S2.



About Hypervelocity expansion tunnel test facility:

• **Facility Establishment and Funding:**

The facility was established at the Department of Aerospace Engineering, IIT Kanpur, by the Hypersonic Experimental Aerodynamics Laboratory. It received funding amounting to Rs 4.5 Crores from the Fund for Improvement in S&T Infrastructure (FIST) under the Department of Science & Technology (DST) in 2018.

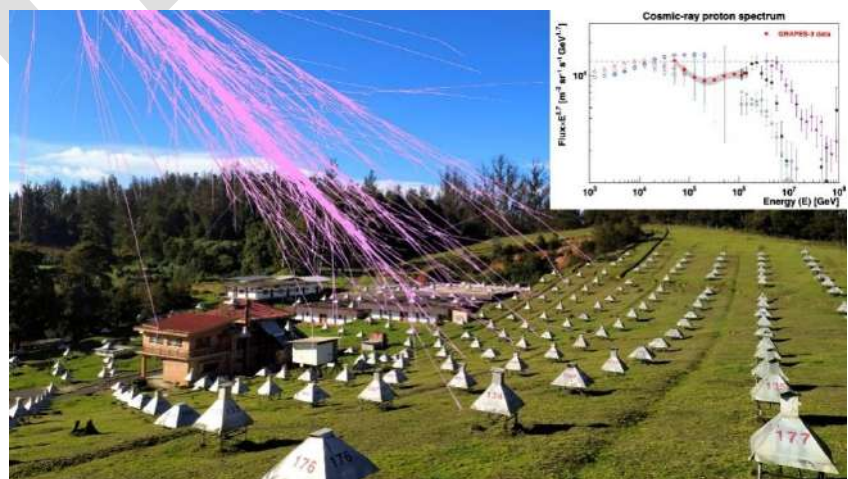
- **Purpose and Capabilities:** Known as S2, the facility is capable of simulating hypersonic conditions and achieving flight speeds ranging between 3-10 km/s.
- **Significance and Applications:** S2 serves as a crucial testing ground for various projects, including Gaganyaan, Reusable Launch Vehicle (RLV), and hypersonic cruise missiles, undertaken by ISRO and DRDO.



GRAPES-3 experiment

Context

- The Government of Karnataka, in collaboration with the All India Game Developers Forum (AIGDF), is set to launch a Digital Detox initiative, concentrating on gaming and social media.



About Gamma Ray Astronomy PeVEnergieS phase-3 (GRAPES-3):

Collaborating Institutions

- Tata Institute of Fundamental Research, Mumbai, India; Osaka City University, Osaka, Japan

Location

- Ooty, Tamil Nadu, India

Experimental Setup

- Array of air shower detectors and a large area muon detector

Scientific Objectives

- Study cosmic rays, including their origin, acceleration, propagation, and interaction with Earth's atmosphere



Geographical Advantage

- Unique atmospheric conditions in Ooty providing an ideal environment for cosmic ray studies

Primary Focus

- Investigate the mysteries surrounding highly energetic cosmic particles and their impact on the universe.

The Healthy Indian Project

Context

- The Healthy Indian Project (THIP), a health information platform in India, has recently been included as a member of the World Health Organization's Vaccine Safety Net (VSN).

Mission and Scope:

- THIP leverages diverse media formats (website, app, YouTube channel, chatbot) to provide **accurate, evidence-based health information** tailored to the Indian context.
- It focuses on issues like chronic diseases, nutrition, maternal and child health, mental health, and vaccine awareness, tackling misinformation and promoting healthy habits.
- THIP works across various levels, empowering individuals and communities, engaging with healthcare professionals, and collaborating with policymakers.

Key Initiatives:

- **THIP Media:** Provides credible health information through articles, videos, and social media content in multiple Indian languages.
- **THIP Care App:** Simplifies individual and family health record management, facilitating healthcare access and informed decision-making.
- **RAKsHA Chatbot:** Answers common health questions, dispels myths, and empowers users to fact-check information.
- **THIP Academy:** Trains healthcare professionals on effective communication and patient education, bridging the communication gap.
- **Policy Advocacy:** Advocates for evidence-based health policies and facilitates dialogue between stakeholders.

Impact and Recognition:

- THIP has reached millions of Indians with its culturally sensitive and accessible health information.
- It has been recognized for its efforts by various institutions, including:
 - **American Accreditation Commission International (AACI):** Accreditation for credible health content.
 - **World Health Organization (WHO):** Recognition as a member of the Vaccine Safety Net.
- THIP is playing a crucial role in improving health literacy and promoting wellness in India.



Anti-Satellite Weapon

Context

- Recent statements from U.S. officials, including House Intelligence Committee Chairman Mike Turner and President Joe Biden, have raised concerns about a potential new anti-satellite weapon being developed by Russia.

About Anti-Satellite Weapon:

- Anti-satellite weapons (ASATs) are designed to incapacitate or destroy



satellites in orbit. Their development and use raise significant concerns about the militarization of space, potential risks to critical infrastructure, and the creation of space debris.



Types of ASATs

- **Kinetic Impactors:** Launched missiles or projectiles physically collide with satellites, destroying them on impact.
- **Directed-Energy Weapons:** Lasers or high-powered microwaves damage or disable satellites through their energy beams.
- **Electronic Warfare:** Disrupting satellites' communication or control systems, rendering them inoperable.

History and Development

- **The first successful ASAT test occurred in 1959** by the Soviet Union.
- Since then, several countries, including the **US, Russia, China, and India**, have developed and tested ASATs.
- **The 2007 Chinese test, destroying its own weather satellite**, raised concerns and led to calls for international regulation.

Current Status

- **No international treaty currently bans** the development or use of ASATs.
- However, several countries are engaged in discussions and negotiations aiming towards regulations to prevent an arms race and ensure responsible behavior in space.

Sora

Context

- The model, called Sora, can generate videos up to a minute long while maintaining visual quality and adherence to the user's prompt, OpenAI.



About OpenAISora:

- **About:** Sora is an **innovative AI model developed by OpenAI**, drawing from advancements in DALL·E and GPT models. It specializes in generating videos based on textual instructions, offering a versatile platform for creative content production.

Features

- **Sophisticated Scene Generation:** Sora excels in **crafting intricate scenes encompassing diverse characters, precise actions, and detailed backgrounds**. It comprehends user instructions adeptly, translating them into realistic visual representations.
- **Realism and Emotion:** The model **goes beyond mere scene construction**, imbuing characters with vibrant emotions. This capability enhances the authenticity and engagement of the generated content.
- **Multiple Shot Composition:** Sora's output extends beyond single-frame imagery by incorporating **multiple shots within a video**. It maintains consistency in characters and visual style across these shots, enhancing the coherence of the narrative.

Carbon Nanotubes

Context

- A novel method for directly synthesizing Carbon nanotubes (CNTs) on glass substrates at a temperature of 750 °C could help energy research, biomedical fields, and optoelectronics.

About Carbon Nanotubes:

About

- Carbon nanotubes (CNTs) are **cylindrical molecules** made up of carbon atoms arranged in a hexagonal lattice, similar to graphene. They have a **diameter of approximately 1-100 nanometers (nm)** and can be much longer, even millions of times their diameter.

There are two main types of carbon nanotubes

- **Single-walled nanotubes (SWNTs):** These consist of a single layer of graphene rolled into a tube. They are typically 1-2 nm in diameter and have exceptional electrical and mechanical properties.
- **Multi-walled nanotubes (MWNTs):** These consist of multiple layers of graphene rolled into concentric tubes. They are typically larger in diameter than SWNTs (5-20 nm) and have different properties depending on the number of layers.

Properties of carbon nanotubes

- **High strength:** CNTs are one of the strongest materials known, with a tensile strength exceeding that of steel.
- **Low weight:** CNTs are extremely lightweight, making them ideal for applications where weight is a critical factor.
- **High electrical conductivity:** SWNTs can be metallic or semiconducting, depending on their chirality, and have excellent electrical conductivity.
- **High thermal conductivity:** CNTs have very high thermal conductivity, making them useful for heat dissipation applications.
- **Chemical stability:** CNTs are resistant to corrosion and oxidation, making them suitable for a variety of environments.

Applications

- **Electronics:** CNTs can be used to make transistors, wires, and other electronic devices with improved performance.
- **Composites:** CNTs can be added to polymers and other materials to create stronger, lighter, and more conductive composites.
- **Nanophotonics:** CNTs can be used to make optical devices, such as lasers and sensors.
- **Biomedical applications:** CNTs can be used to deliver drugs, image cells, and for other biomedical applications.

Plasma Analyser Package for Aditya-L1

Context

- Advanced sensors of a payload on board India's maiden solar mission Aditya-L1 have successfully detected the impact of coronal mass ejections (CMEs), according to ISRO.

About Plasma Analyser Package for Aditya-L1 (PAPA):

- **About:** The Plasma Analyser Package for Aditya-L1 (PAPA) is an instrumental payload onboard the Aditya-L1 mission, **India's first mission** dedicated to studying the Sun. Launched in September 2023, **Aditya-L1 is positioned in a halo orbit around the first Lagrange Point (L1), approximately 1.5 million kilometers from Earth.** This vantage point allows PAPA to directly measure the solar wind, a stream of charged particles emanating from the Sun's corona.



PAPA's Role

- **Composition Analysis:** PAPA is equipped with two sensors to analyze the composition and energy distribution of the solar wind:
- **Solar Wind Electron Energy Probe (SWEEP):** Measures the energy of solar wind electrons, providing insights into their acceleration mechanisms.
- **Solar Wind Ion Composition Analyser (SWICAR):** Identifies and measures the energy of various ions present in the solar wind, including protons, alpha particles, and heavier elements.
- **Understanding Solar Processes:** By analyzing the solar wind, PAPA helps scientists understand various solar phenomena like coronal mass ejections (CMEs) and solar flares. These events can significantly impact Earth's magnetosphere and technological infrastructure.

Blanets

Context

- The three planets (other than the earth) featured in Christopher Nolan's 2014 sci-fi epic film Interstellar are worlds of extremes – and they could exist.

About Blanets:

Blanets

- Planets that may form within massive **dust and gas clouds surrounding supermassive black holes**, potentially existing in reality.

Formation Theory

- **Japanese scientists proposed in 2019** that planets could form near supermassive black holes due to collisions within dust clouds.



Unique Characteristics

- **Blanets are not expected to resemble habitable worlds**, unlike Earth, because of their formation near black holes.

Surrounding Environment

- Black holes are surrounded by massive discs of gas and dust, influenced by gravitational pull and heating effects.

Galactic Presence

- Nearly every galaxy contains a supermassive black hole at its center, acting as a gravitational nucleus around which stars organize.

Formation Process

- Similar to planets near young stars, blanets form from the collision and aggregation of dust and gas particles in swirling disks.

Blanet Characteristics

- **Blanets are anticipated to be about 3,000 times larger** than Earth and orbit the black hole at a distance of about 100 trillion km.

Implications and Speculations

- **Blanets represent extreme environments**, offering insights into dynamic interactions between black holes and their surroundings.

Large Language Model

Context

- Large Language Models (LLMs) are foundational to the capabilities of modern AI chatbots like ChatGPT and Gemini.

About Large Language Models (LLMs):

- **About:** They empower these AI systems to engage in conversations with humans and predict subsequent words or sentences.
- LLMs represent a significant advancement in the field of artificial intelligence, enabling machines to learn, think, and communicate in a manner that was once limited to humans.

Features

- LLMs are large, general-purpose language models capable of understanding and generating human-like text.

- LLMs serve as the backbone of generative AI, enabling machines to comprehend and produce human language across various industries and applications.
- **Training Data:** LLMs are trained on massive corpora of text data, often comprising billions or even trillions of words from diverse sources such as books, articles, websites, and other textual content available on the internet.
- **Deep Learning Architecture:** LLMs are typically built using deep learning architectures, such as recurrent neural networks (RNNs), convolutional neural networks (CNNs), or more commonly, transformer architectures like GPT (Generative Pre-trained Transformer) models.



Zombie Deer Disease

Context

- Zombie deer disease is spreading among wildlife. Transmission increases across North America, Scandinavia, and South Korea, and scientists have warned that this disease, which until now is infecting wildlife only, can infect humans as well.



About Zombie deer disease:

- **About:** Zombie deer disease, also known as **Chronic Wasting Disease (CWD)**, is a prion disease affecting deer, elk, reindeer, sika deer, and moose. It's a fatal neurological illness with no known cure or vaccine.

Transmission:

- **Prions:** Caused by misfolded prion proteins that spread through contact with infected bodily fluids or contaminated environments.
- **Indirect Transmission:** Animals can ingest prions from contaminated soil, water, or food sources where infected animals have been.

Symptoms:

- **Early Stages:** Can be difficult to detect initially.
- **Later Stages:** Listlessness, weight loss, drooping ears, tremors, ataxia (incoordinated movement), excessive drooling, and eventually death.
- **Appearance:** The name "zombie deer disease" comes from the vacant stare and emaciated appearance of infected animals in later stages.

Smishing

Context

- In today's digital age, where smartphones are practically an extension of ourselves, smishing poses a real and growing threat.

About Smishing:

- **About:** A smishing attack is a type of cybercrime that uses **deceptive SMS text messages** to trick recipients into providing sensitive information such as **passwords, credit card numbers or other personal data**. A smishing attack exploits the trust that people have in text messages.



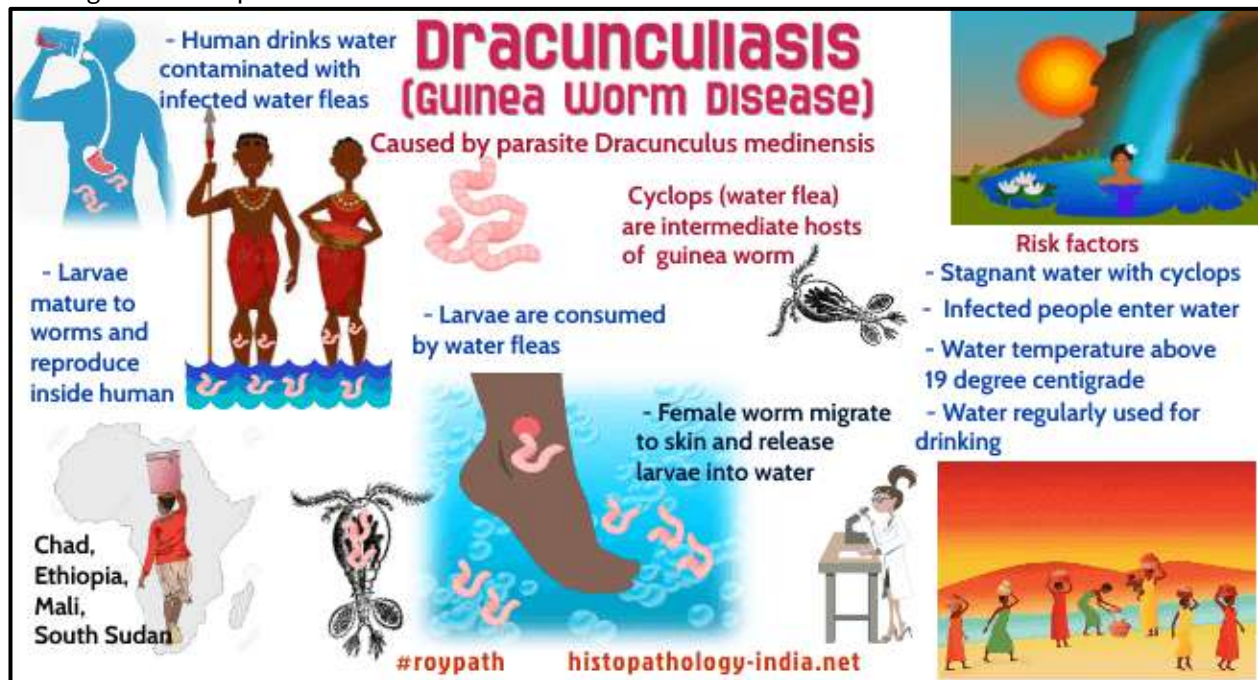
Function

- **Deception:** Attackers send deceptive text messages that appear to be from legitimate sources like banks, credit card companies, delivery services, or even government agencies.
- **Urgency or Fear:** The messages often create a sense of urgency or fear, urging the recipient to take immediate action.
- **Phony Links:** They might contain links to fake websites that look real, prompting users to enter personal details or download malware disguised as legitimate applications.

Guinea worm disease

Context

- The global effort to eradicate Guinea worm disease has achieved significant success, with reported cases decreasing from over 3.5 million in the 1980s to just six cases in 2023, according to the World Health Organization report.



About Guinea worm disease:

- Guinea worm disease, also known as dracunculiasis, is a parasitic infection caused by the worm *Dracunculus medinensis*. It's a neglected tropical disease (NTD) primarily affecting remote communities in Africa.



Transmission:

- Contaminated Water:** People become infected by drinking water contaminated with copepods (tiny water fleas) that harbor Guinea worm larvae.
- Internal Migration:** The infected copepods are ingested by humans, and the larvae mature within the body over a year.

Symptoms:

- Painful Blister:** After approximately a year, a painful blister forms on the skin, usually on the lower limbs, where the mature female worm emerges.
- Debilitating:** The emergence of the worm can be excruciatingly painful and debilitating, making it difficult for people to work or care for themselves.
- Secondary Infection:** The open wound formed by the emerging worm is susceptible to secondary bacterial infections.

Treatment:

- Slow Removal:** There is no medication for Guinea worm disease. The traditional treatment involves slowly extracting the worm over several weeks or months by carefully rolling it onto a stick to avoid breaking it. This process can be painful and requires patience.
- Supportive Care:** Treatment focuses on managing the pain, preventing secondary infections, and providing supportive care to the patient.

8.6 SNIPPETS

APTI PLUS



Bluetongue Disease

- Bluetongue disease is a viral illness that primarily affects ruminants, including sheep, cattle, goats, and deer. It is caused by the bluetongue virus (BTV), which belongs to the genus Orbivirus within the family Reoviridae.
- Bluetongue disease is transmitted by certain species of biting midges (*Culicoides* spp.), which serve as vectors for the virus.

APTI PLUS



Transiting Exoplanet Survey Satellite

- TOI-715b has a period of 19.3 days and orbits within the habitable zone of its parent star, where conditions could support the presence of liquid water on its surface.
- TOI-715, also known as TIC 271971130, is classified as an M dwarf star of spectral type M4.
- It is located approximately 137 light-years away in the constellation of Volans and is estimated to be around 6.6 billion years old, making it older than our Sun.

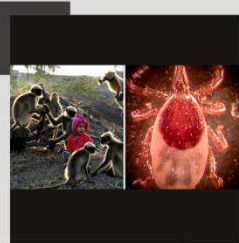
APTI PLUS



InfexnTM

- Kerala gears up for India's 1st genomics-based infectious diseases test.
- IIT- Bombay- based Haystack Analytics and NIMS Medicity at Neyyattinkara are collaborating to introduce 'infexnTM'.
- This initiative marks a pivotal moment in the city's diagnostic landscape, promising immaculate results and competent services by equipping the diagnostic center with genome sequencing technology to tackle infectious diseases effectively.

APTI PLUS



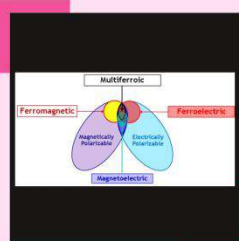
Kyasanur Forest Disease

- Kyasanur Forest Disease (KFD) is a tick-borne viral illness endemic to Karnataka. The disease primarily affects the Western Ghats region, including Karnataka, Maharashtra, Kerala, Tamil Nadu, and Goa.
- Kyasanur Forest Disease (KFD) is a serious and potentially fatal viral infection that affects humans and animals.
- It is caused by the Kyasanur Forest Disease Virus (KFDV), a member of the Flavivirus family that also includes dengue, yellow fever, and Zika viruses.



INSAT-3DS

- INSAT-3DS is based on ISRO's I-2k bus platform and has a lift-off mass of 2,275 kilograms.
- INSAT-3DS aims to enhance India's meteorological services, complementing the existing INSAT-3D and INSAT-3DR satellites.
- It will improve monitoring of Earth's surface, atmosphere, oceans, and environment, thereby enhancing data collection, dissemination, and satellite-aided search and rescue services.
- Indian industries have played a significant role in the development of INSAT-3DS.



Magnetoelectric multiferroics

- Magnetoelectric multiferroics are a special class of materials popular among the research fraternity for their rarity and unique properties.
- These materials can exhibit both magnetism and ferroelectricity simultaneously.
- Application: For advanced technology applications like spintronics, electronic memory devices, and other electronic components like actuators and switches.
- MnBi2S4 is also known as mineral graffianite and belongs to the ternary manganese chalcogenide family.



Jardiance

- Jardiance belongs to a class of drugs called sodium-glucose cotransporter-2 (SGLT2) inhibitors.
- These drugs work by blocking SGLT2 proteins in the kidneys, which are responsible for reabsorbing glucose (sugar) back into the bloodstream.
- By blocking this action, Jardiance helps the body eliminate excess sugar through urine, lowering blood sugar levels.
- Type 2 Diabetes: Jardiance is approved by the FDA (Food and Drug Administration) as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes.



Alaskapox

- Alaskapox is a new and rare virus that belongs to the orthopoxvirus family, which includes smallpox, monkeypox, and cowpox.
- It was first identified in a patient in Fairbanks, Alaska, in 2015. Since then, only seven cases have been reported in the state, all of them in people who had contact with small animals such as voles and shrews.
- There is no evidence so far of human-to-human transmission of Alaska Pox, but it is possible that direct contact with skin lesions could transmit the virus.



Smart Food Grain Storage System (SAFEETY) technology

- Developed by SAMEER (Society for Applied Microwave Electronics Engineering and Research), an autonomous R&D institution under MeitY.
- Features conveyORIZED loading and unloading of grain bags with Radio Frequency Identification (RFID) for traceability.
- Offers online weight and moisture measurement capabilities.
- Utilizes Radio Frequency Based Removal of Moisture from Grain.
- Capable of handling almost one truckload (approximately 28 tons) of grains in just 40 minutes.
- Technology transfer aligns with the goals of Vikshit Bharat @2047, focusing on Innovation, Science, and Technology to propel India towards global leadership in digital transformation and innovation.



SOFIA (Stratospheric Observatory for Infrared Astronomy)

- SOFIA, the Stratospheric Observatory for Infrared Astronomy, was a Boeing 747SP aircraft modified to carry a 2.7-meter (106-inch) reflecting telescope (with an effective diameter of 2.5 meters or 100 inches).
- SOFIA was made possible through a partnership between NASA and the German Space Agency at DLR.
- SOFIA was designed to observe the infrared universe.
- SOFIA's telescope instruments – cameras, spectrometers, and polarimeters – operated in the near-, mid- and far-infrared wavelengths, each suited to studying a particular phenomenon.

8.7 1 MAINS & 5 MCQs

Q1. *The Healthy Indian Project (THIP) has emerged as a significant platform for health information dissemination in India. Critically evaluate its role in promoting public health awareness and suggest ways to enhance its reach and effectiveness.*

Approach:

- Introduction:
- Briefly introduce THIP, mentioning its key objectives (e.g., promoting health literacy, dispelling misinformation about vaccines).
- Briefly highlight the importance of public health awareness in India.
- Positive Role of THIP:
- Discuss how THIP contributes to public health awareness:
 - Utilizing various communication channels (website, app, chatbot).
 - Countering vaccine hesitancy through reliable information.
- Critical Evaluation:
- Discuss potential limitations of THIP:
 - Addressing deep-rooted cultural beliefs and traditional practices.
 - Building trust and overcoming information overload.
- Enhancing Reach and Effectiveness:
- Suggest strategies to improve THIP's impact:
 - Collaborations with local NGOs and community leaders.
 - Utilizing offline communication channels (e.g., workshops, radio programs).
 - Employing innovative communication tools (e.g., social media campaigns).
- Conclusion:
- Summarize the importance of THIP's work in promoting public health awareness.
- Offer a balanced perspective, acknowledging its strengths and suggesting areas for improvement.

Q2. What is the primary vector responsible for transmitting the Bluetongue virus?

- A) Mosquitoes
- B) Ticks
- C) Biting Midges
- D) Fleas

Q3. Which of the following statements about exoplanets is correct?

1. Exoplanets are celestial bodies found within the asteroid belt of our solar system.
2. Exoplanets are planets located outside our solar system, orbiting stars other than the Sun.
3. Exoplanets can be gas giants similar in size and composition to Jupiter and Saturn.
4. Exoplanets are only discovered using ground-based telescopes.

Options:

- A) 1 and 2
- B) 2 and 3
- C) 3 and 4
- D) 1 and 4

Q4. Which of the following statements regarding sonic speeds is correct?

1. Sonic speed refers to the speed of light in a vacuum.
2. Sonic speed is the maximum speed attainable by any object in motion.
3. Sonic speed is the speed at which sound waves propagate through a medium.

4. Sonic speed is inversely proportional to the density of the medium.

Options:

- A) 1 and 2
- B) 2 and 3
- C) 3 and 4
- D) 1 and 4

Q5. SOFIA airborne observatory often mentioned in news is associated with which of the following space agency?

- A) NASA
- B) ROSCOSMOS
- C) JAXA
- D) ISRO

Q6. Consider the following statements in the context of the Alaskapox.

1. It primarily spreads through close contact with infected individuals or their lesions.
2. Zoonotic transmission from rodents like red-backed voles is suspected.
3. Airborne transmission is considered a major route of spread.
4. Human-to-human transmission is extremely rare.

How many of the above statements are correct?

- A) Only one
- B) Only two
- C) Only three
- D) All four

ANSWERS: 2) C, 3) B, 4) C, 5) A, 6) C

8. CULTURE & HISTORY

8.1 SHORT ARTICLES

Subika Painting

Context

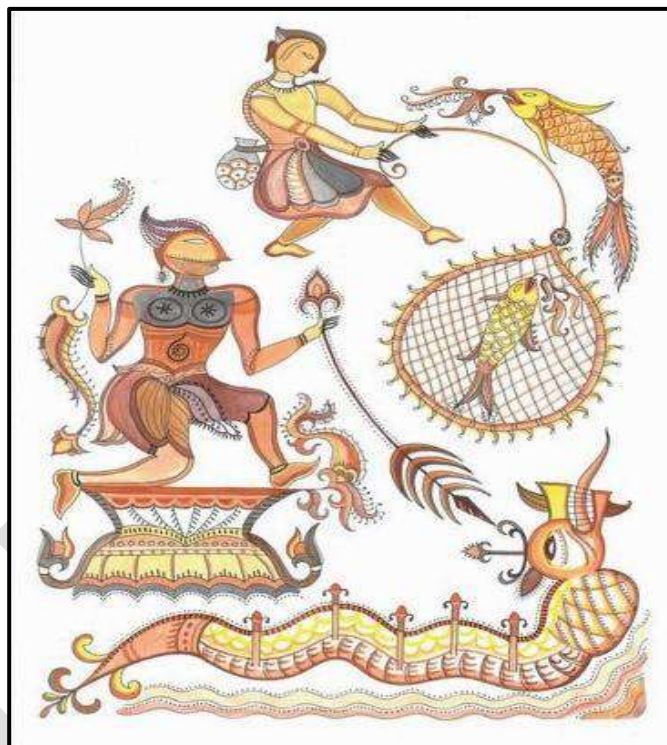
- The Subika Paintings of Manipur hold profound cultural significance, yet they face the threat of extinction due to neglect.

Details:

- While Manipur boasts a rich cultural heritage, some of its invaluable art forms are on the brink of extinction due to neglect and to save them, Dr Yumnam Sapha, an Assistant Professor of Fine Arts at Manipur University, is on a mission.

Subika Paintings, intricately linked to the Meitei community's cultural history, are portrayed in six surviving manuscripts: Subika, Subika Achouba, Subika Laishaba, Subika Choudit, Subika Cheithil, and Thengrakhel Subika.

Experts estimate the existence of Subika paintings since the 18th or 19th century.



About Subika Laishaba Manuscript:

Cultural Motifs and Composition

- Subika Laishaba's paintings compose cultural motifs influenced by pre-existing features and cultural worldviews. The visual language includes lines, shapes, forms, colors, and patterns, creating a unique composition.

Authentic Continuation of Tradition

- Subika Laishaba is considered a direct and authentic continuation of the Meitei cultural tradition, portraying visual images with cultural significance, meaning, and values.

Illustrations and Manuscript Materials

- The visual images in Subika Laishaba are painted on handmade paper, showcasing the indigenous preparation of materials. The manuscript's materials include handmade paper or tree bark, demonstrating the rich heritage of manuscript painting.

Visual Language and Cultural Motifs

- Visual language in Subika Laishaba utilizes lines, shapes, forms, and colors to express cultural motifs. Cultural values are embedded in the visual language, representing the Meitei community's identity.

Frame and Floral Motifs

- Illustrations are enclosed within a frame, consisting of two parallel Indian-red color lines. Floral motifs are present at intersections, outlined with Indian-red color, filled with yellow-ochre, and featuring a black dot.

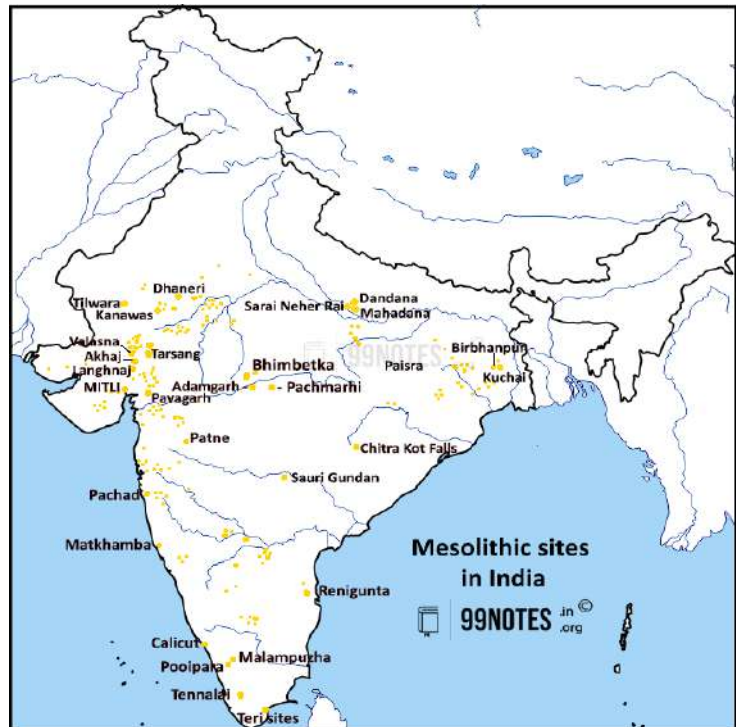
Mesolithic Period

Context

- Mesolithic era rock paintings have been discovered at Sitamma Loddi, Gattusingaram, in Peddapalli district by photojournalist D Ravinder Reddy and rock art expert Dr Muralidhar Reddy.

About Mesolithic Age:

- The Mesolithic Age, also known as the **Middle Stone Age**, was a crucial phase in human history. It followed the Paleolithic Age and was succeeded by the Neolithic Age. During this time, humans adapted to their surroundings and the changing climate.
- The name "**Mesolithic**" is derived from the Greek words "mesos," meaning middle, and "lithos," meaning stone, signifying the intermediate stage between the old and the new ways of life.



Key facts about the Mesolithic Age:

Period

- Approximately 12,000 BCE - 2000 BCE

Geographical Spread

- Throughout the Indian subcontinent, significant Mesolithic sites were found in various regions including present-day Madhya Pradesh, Rajasthan, Uttar Pradesh, Gujarat, Maharashtra, Karnataka, Tamil Nadu, and Kerala.

Cultural Developments

- Transition from Paleolithic **hunter-gatherer societies** to more settled communities with semi-permanent settlements.

Lifestyle

- Semi-sedentary lifestyle characterized by **hunting, gathering, fishing**, and some rudimentary agriculture.

Tool Technology

- Advancements in tool technology, including the continued use of stone tools such as microliths (small, finely crafted stone tools), bone tools, and eventually the emergence of ground stone tools.

Artistic Expressions

- Evidence of artistic expressions in the form of **rock paintings and engravings depicting hunting scenes, animals, and human figures**.

Social Organization

- Probable emergence of more complex social structures compared to the preceding Paleolithic period, with **evidence suggesting the existence of communal activities** and possibly rudimentary forms of social hierarchy.

Environmental Adaptations

- Adaptations to diverse environments ranging from river valleys to coastal regions and forests, reflecting a broad spectrum of **ecological niches exploited by Mesolithic communities**.

Cultural Diversity

- Mesolithic cultures in India were diverse, exhibiting regional variations in subsistence strategies, material culture, and artistic expressions.

End of the Mesolithic Period

- The end of the Mesolithic period in India is marked by the transition to the Neolithic period, characterized by further advancements in **agriculture, domestication of animals, and the emergence of settled agricultural communities.**

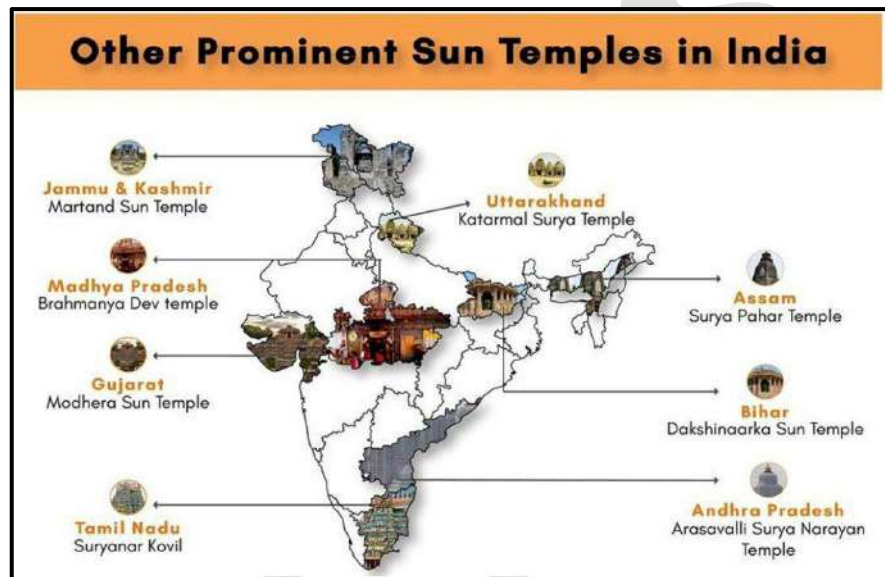
Martand Sun Temple

Context

- Members of a little-known Hindutva group forced their way into the Archaeological Survey of India (ASI)-protected Martand sun temple recently.

Details:

- Members of a little-known Hindutva group forced their way into the Archaeological Survey of India (ASI)-protected Martand sun temple in southern Kashmir's Anantnag to hold prayers on 22 January, the same day as the consecration of the Ram Temple in Ayodhya.
- The local ASI staff attempted to stop their entry but were unable to prevent the members from squatting within the protected ruins of the eighth-century temple in Mattan, which was built by Lalitaditya Muktapida of the Karkota dynasty.



About Martand Sun Temple:

About

- The Martand Sun Temple, also known as the Martand Surya Mandir, is an ancient Hindu temple dedicated to the Sun God, located near **Anantnag in the Indian state of Jammu and Kashmir.**

Construction Period

- The Martand Sun Temple was built during the 8th century by King **Lalitaditya Muktapida of the Karkota Dynasty.**

Architectural Style

- The temple is a fine **example of Kashmiri architecture** and is renowned for its grandeur and artistic excellence. It reflects a blend of Greek, Roman, Iranian, and Indian architectural styles.

Architecture and Layout

- Design and Layout:** The temple is situated on top of a plateau, providing a panoramic view of the surrounding mountains. It is built in the form of a colonnaded mandapa surrounded by a courtyard.
- Central Shrine:** The main shrine, dedicated to the Sun God, was originally surrounded by 84 smaller shrines.
- Columns and Carvings:** The temple has numerous intricately carved columns, depicting various scenes from Hindu mythology.

- The carvings include images of deities, celestial beings, and other mythological figures.
- **Influence of Greek Architecture:** The temple is often compared to classical Greek temples, particularly the Temple of Hercules in Rome, due to its architectural similarities.

Preserving Dhokra Shilpkala

Context

- Chhattisgarh's Ocher Studio is helping to preserve India's 4,000-year-old craft- DhokraShilpkala.

Details:

- The number of practicing Dhokra artisans is declining due to several reasons, including lack of economic viability, migration to cities, and lack of interest among younger generations.
- Changing consumer preferences and the influence of mass-produced goods threaten the market for traditional, handcrafted Dhokra pieces.



Key Features:

Lost-wax technique

- Molten metal replaces a wax model, creating intricate and delicate figurines, jewellery, and utensils.

Natural materials

- Beeswax, clay, and bell metal (an alloy of copper, tin, and zinc) are the primary materials used.

Tribal motifs

- Dhokra artworks depict animals, birds, deities, and geometric patterns with cultural significance.

Handmade process

- Each piece is handcrafted, making them unique and imbued with cultural value.

Sustainable

- Uses locally sourced materials and minimal waste, making it an eco-friendly art form.

Dhokra Shilpkala, also known as lost-wax casting, is a centuries-old metal casting technique practiced by tribal communities in India, particularly in Chhattisgarh, Odisha, West Bengal, and Jharkhand.

Hastal Minar

Context

- In an era where heritage preservation is paramount, efforts are being made to unravel the mysteries surrounding the Hastal Minar.

Unique Features:

- **Architectural style:** Despite its smaller size, the Minar resembles the Qutub Minar in its multi-story structure, tapering design, and use of red bricks.
- **Local legends:** Several local legends surround the Minar, attributing its construction to various historical figures and purposes.

Significance:

- **Historical landmark:** The Minar serves as a tangible reminder of Delhi's past and the architectural styles of different eras.
- **Cultural heritage:** It represents the artistic and creative traditions of its builders and is an important part of India's cultural heritage.
- **Tourist potential:** With proper restoration and promotion, the Minar could be a valuable tourist attraction, boosting local tourism and awareness of Delhi's rich history.



Deepastambham

Context

- A newly-discovered Deepastambham (lamp post) on the edge of River Krishna in Nalgonda district casts a fresh light on trade ties in the region in early medieval times.

Key details:

Discovery

- Archaeologists unearthed a 20-foot-tall pillar with hollows for lamps and a multi-lingual inscription in Mudimanikyam village of Nalgonda, Telangana.

Location

- The pillar is situated on a slope from the village leading to the river bank.

Architectural

- While Dhvajastambham (flag poles) are common in temple architecture, lamp posts are uncommon in the Deccan region but prevalent in temples along the west coast, like Goa.

Dating

- Based on the inscription engraved on the lamp post, experts estimate its origin to June 1635.

Inscription

- The inscription, a mixture of Telugu and Tamil, is dedicated to Kasi Viswanatha, suggesting its religious significance.

Functionality

- Due to its towering height, the pillar likely served as a lighthouse guiding riverine trade routes.

Historical Link

- The site is approximately 210 kilometers from Golconda Fort, once the seat of the Qutub Shahi dynasty's rule over Golconda.



Deepastambham is the traditional lamp post (holds many layers of oil-based lamps) that can still be found in temples of India.

Jan Bharat Rang

Context

- Recently, the National School of Drama (NSD) has invited all performing art groups for participation in Jan Bharat Rang under the banner of Bharat Rang Mahotsav 2024.

Evolution of BRM:

- Over the years, BRM has expanded its horizons, transcending geographical boundaries and cultural constraints.
- The festival has become a **melting pot of ideas, styles, and traditions, contributing to the global discourse** on theatre and performing arts.
- The inclusion of Jan Bharat Rang within BRM further enhances this diversity, offering a unique glimpse into the myriad forms of expression prevalent in India.

Key Features:

Themes

- The performances in Jan Bharat Rang are intricately woven around three central themes - "**Viksit Bharat**" (*Developed India*), "**PanchPran**" (*Five Pledges*), and "**Vasudhaiva Kutumbakam**" (*The World is One Family*).

Jan Bharat Rang, an integral part of the Bharat Rang Mahotsav, stands as a testament to the rich tapestry of Indian performing arts. Envisioned as a grand mosaic of 2,000 short performances, this event is a showcase of the diversity and vibrancy that defines the cultural landscape of India.

- These themes reflect India's vision for inclusive progress and global harmony, capturing the essence of the country's cultural and societal aspirations.

Voluntary Participation

- Participation in Jan Bharat Rang is a voluntary endeavor, where diverse groups from different regions and cultural backgrounds craft productions lasting 15-20 minutes in their respective fields.
- This voluntary engagement ensures a genuine representation of the artistic prowess present across the nation.

Bharat Rang Mahotsav Overview

- Bharat Rang Mahotsav (BRM), also known as the **National Theatre Festival**, had its inception in 1999 and has been an annual cultural extravaganza organized by the prestigious **National School of Drama (NSD) in New Delhi**.
- Originally designed to showcase the works of Indian theatre practitioners, BRM has evolved over the years to become a global platform, attracting talented performers from around the world.

Objective of BRM

- The primary objective of Bharat Rang Mahotsav is to provide a comprehensive platform for Indian theatre practitioners to showcase their creativity and artistic expressions.
- As a significant cultural event, **BRM has not only become a beacon for the Indian theatre community but has also fostered cultural exchanges** by welcoming international performers to share their artistic narratives.

Paruveta Utsavam

Context

- Indian National Trust for Art and Cultural Heritage (INTACH) is making efforts to secure UNESCO recognition for the annual 'Paruveta' festival.

About:

- The festival begins with the ceremonial procession of the deity from the temple sanctum sanctorum to a specially erected platform called the **Paruveta Mandapam**. The deity is then **placed on a palanquin** and taken to the nearby hills, where a mock hunt is enacted.
- **The mock hunt is a symbolic representation of the victory of good over evil**. The tribals who participate in the festival believe that by participating in the mock hunt, they are helping to protect the deity from harm.
- The festival **concludes with the return of the deity to the temple**. The festival is a major event in the Ahobilam calendar and attracts thousands of devotees from all over India.

Unique Features:

- The festival is held for 40 days, from the day of Ugadi to the **day of Akshaya Tritiya**.
- The festival is a celebration of the **victory of Lord Narasimha over the demon Hiranyakashipu**.
- The festival is a major event in the **Ahobilam calendar** and attracts thousands of devotees from all over India.

Paruveta Utsavam is an annual mock hunting festival held at the Sri Narasimha Swamy temple in Ahobilam, Andhra Pradesh, India. The festival is a celebration of the victory of Lord Narasimha over the demon Hiranyakashipu.



Mohammed Quli Qutb Shah's tomb

Context

- The historic Qutub Shahi tombs in Hyderabad now has a digital twin. Hexagon, a reality technology solutions company, has used drone scanners to capture over 10.7 billion data points, representing the 10,000- square metre area.

Architectural Features:

Square Base

- The tomb stands on a square platform measuring 65 meters on each side and 4 meters high.

Octagonal Structure

- The tomb itself is an octagonal structure with three storeys. The first two storeys have arched openings on each side, while the third storey is enclosed with perforated latticework.

Dome

- The tomb is crowned by a magnificent double dome, the inner one being smaller and resting on the outer one. The domes are covered with white plaster and adorned with intricate floral and geometric designs.

Interior Decoration

- The interior of the tomb is richly decorated with stuccowork, calligraphy, and floral motifs. The sarcophagus of Muhammad Quli Qutb Shah is located in the central chamber of the tomb.



Mohammed Quli Qutb Shah's tomb is a majestic mausoleum located in the Qutb Shahi Tombs complex at the foot of Golconda Fort in Hyderabad, India. It was built in 1602 by Sultan Muhammad Quli Qutb Shah, the fifth king of the Qutb Shahi dynasty, and is considered one of the grandest and most architecturally significant tombs in the complex.

Abu Dhabi's First Hindu Stone Temple

Context

- Abu Dhabi, the capital of the United Arab Emirates (UAE), inaugurated its first traditional Hindu stone temple on February 14, 2024.

The BAPS Hindu Mandir:

- The temple, officially named the BAPS Hindu Mandir Abu Dhabi, is a beautiful structure built in the Nagara style of architecture, similar to the recently inaugurated Ram Temple in Ayodhya, India.
- It is constructed from 18 lakh bricks, seven lakh man hours, and 1.8 lakh cubic metres of sandstone sourced directly from Rajasthan, India. The intricate carvings and sculptures on the temple's exterior and interior showcase the rich heritage of Indian craftsmanship.



Key Features:

Sprawling Complex

- The temple complex spans 27 acres and includes a prayer hall, a community center, an exhibition hall, and educational facilities.

Religious Harmony

- The temple will serve as a place of worship for Hindus of all denominations and backgrounds, fostering a sense of community and belonging.

Cultural Exchange

- The temple will also serve as a platform for cultural exchange, promoting understanding and appreciation between different faiths and communities.

Significance of the Temple

- **Religious Tolerance:** It reflects the UAE's commitment to religious tolerance and inclusivity, providing a space for Hindus to practice their faith freely.
- **Cultural Exchange:** It serves as a bridge between cultures, promoting understanding and appreciation between different communities in the UAE.

- **Architectural Marvel:** The temple itself is a stunning architectural achievement, showcasing traditional Indian craftsmanship and adding to the cultural landscape of Abu Dhabi.

Language Atlas

Context

- The native language of 1.2 million people remains unaccounted for due to the decision to not include languages with less than 10,000 speakers in the Census since 1971.

Background:

- As India emphasizes the importance of imparting education in the mother tongue, particularly at the primary level, there arises a pivotal question regarding the exact number of active languages in the country.
- Given India's vast and diverse terrain where languages change every few miles, determining the thriving languages within its borders has remained a subject of intrigue.

India recognizes 22 languages officially, which are part of Schedule 8 of the Indian Constitution. According to Census data, 97 % of the Indian population speaks one of these languages. There are an additional 99 non-scheduled languages included in the Census, and according to the 2011 Census, around 37.8 million people identify one of these non-Scheduled languages as their mother tongue.

Indira Gandhi National Centre for the Arts (IGNCA)

The Indira Gandhi National Centre for the Arts (IGNCA), an autonomous body under the Union Culture Ministry in India, has proposed a groundbreaking initiative – a nationwide linguistic survey aimed at creating a comprehensive '**Language Atlas of India**'.

This **pan-India Language Mapping Project** is a response to the evolving linguistic landscape and the need to document and preserve the rich diversity of languages across the country.

Key Features:

Objectives of the Language Atlas

- The primary goal is to **meticulously chart the languages spoken** across the nation, preserving local wisdom, knowledge, and culture.

Survey Methodology

- The proposed survey draws inspiration from the Linguistic Survey of India (LSI) by Sir George Abraham Grierson.
- It **suggests a two-step approach:** state-wise data collection followed by region-wise breakdown. This approach aims for a granular understanding of linguistic diversity.

Need for the Language Atlas

- **India officially recognizes 22 languages in the Eighth Schedule of the Constitution**, covering about 97% of the population.
- However, the last **comprehensive survey in 1961 enumerated 1,554 languages**, some with only a single speaker.
- **Languages spoken by fewer than 10,000 people** were omitted from the Census.
- **IGNCA's initiative aims to bridge this gap** by updating and modernizing the data collected over 50 years ago.

Challenges and Considerations

- Documenting languages, especially those **spoken in isolated regions** or by small populations, requires meticulous planning and allocation of substantial resources.
- **The dynamic nature of language**, with dialects evolving and new ones emerging, adds complexity to the process.
- Overcoming these challenges is crucial for ensuring the accuracy and relevance of the Language Atlas.

Sant Guru Ravidas

Context

- PM Narendra Modi launched several developmental initiatives in the vicinity of Sant Ravidas Janmasthan in his parliamentary constituency Varanasi.

Life and Legacy:

- **Early Life:** Born into the Chamar community, traditionally associated with leatherworking and considered "untouchable" in the caste system, Ravidas faced social discrimination.
- **Spiritual Journey:** Despite his background, Ravidas emerged as a powerful spiritual figure. He emphasized devotion to a single God, rejecting rituals and social hierarchies.
- **Teachings:** His teachings focused on love, equality, and social justice. He challenged the caste system and advocated for the dignity of all people, regardless of birth.
- **Literary Work:** Ravidas composed numerous devotional hymns and poems, many of which were included in the holy scripture of Sikhism, the Guru Granth Sahib. His poems are known for their beautiful imagery, simple language, and powerful social messages.

Sant Guru Ravidas was a revered saint, poet, and social reformer who lived in India during the 14th and 15th centuries (estimates range from 1377 to 1433 CE). He is considered a key figure in the Bhakti movement, a devotional movement emphasizing direct connection with the divine.



Significance:

- **Spiritual Leader:** Ravidas is revered by millions of people across India, particularly those belonging to the Ravidasi community, a religious sect inspired by his teachings.
- **Interfaith Harmony:** His message of universal love and equality resonates with followers of various religions, promoting interfaith harmony.
- **Social Reformer:** Ravidas' fight against social injustice continues to inspire movements advocating for equality and human rights.

Attukal Pongala

Context

- Attukal Pongal is one of the most popular festival, which is celebrated in South Kerala.

Central Ritual:

Meaning

- "Pongala" translates to "to boil over" in Malayalam. The central ritual of the festival involves the mass preparation of a sweet dish called "payasam" made with rice, jaggery, coconut, and plantains.

Significance

- This offering symbolizes gratitude to the Goddess Attukal Bhagavathy for blessings and prosperity.

Unique Atmosphere

- On the ninth day, millions of women dressed in traditional attire gather around the temple premises and cook the payasam in earthen pots over open hearths, creating a visually stunning and spiritually charged atmosphere.

Goddess Attukal Bhagavathy


- **The Divine Mother:** Attukal Bhagavathy is a powerful mother goddess believed to protect devotees and grant them blessings.
- **Fierce and Benevolent:** She is depicted with a fierce form but is also considered compassionate and nurturing.

Attukal Pongala is a ten-day religious festival celebrated at the Attukal Bhagavathy Temple in Thiruvananthapuram, Kerala, India. It's considered the largest gathering of women for a festival in the world, attracting millions of devotees every year.

- **Historical Significance:** The origins of the festival are linked to the legend of Kannaki, a legendary figure in South Indian epics.

8.2 SNIPPETS


APTI PLUS



Kokborok

- Kokborok is the language spoken by the Borok people of Tripura.
- The term "kok" means "verbal", while "borok" translates to "people" or "human".
- It belongs to the Sino-Tibetan language family and is a member of the Tibeto-Burman group.
- Its origins can be traced back to at least the 1st century AD, as evidenced by historical records of Tripuri kings.
- Kokborok gained a written form in 1897 when Doulot Ahammad, a Muslim scholar, authored the first Kokborok Grammar titled "Kokboroma ang Tripura - Vyakaran Grammar".
- It was officially recognized as one of the state languages of Tripura on January 19, 1979.

APTI PLUS



Makha Bucha

- Māgha Pūjā, also known as Makha Bucha Day, is a significant Buddhist festival celebrated across several countries, including Cambodia, Laos, Thailand, Sri Lanka, and Myanmar.
- It commemorates a historic gathering between the Buddha and 1,250 of his first disciples, emphasizing the creation of an exemplary Buddhist community.
- The festival is considered the second most important Buddhist celebration after Vesak.

8.3 1 MAINS & 5 MCQs

- Q1.** *What were the key characteristics and advancements during the Mesolithic period, and how did this transitional era contribute to the development of human societies and cultures?*

Approach:

1. **Introduction:** Define the Mesolithic period (10,000–5,000 BCE) as a transitional era between the Paleolithic and Neolithic.
2. **Key Characteristics:** Highlight advancements like microlithic tools, semi-sedentary lifestyles, and early domestication.
3. **Societal Development:** Explore how Mesolithic innovations laid foundations for agriculture, settlement patterns, and cultural complexity.
4. **Regional Variations:** Discuss Mesolithic variations across regions, emphasizing adaptation to local environments.
5. **Conclusion:** Summarize the Mesolithic's role in shaping diverse human societies and paving the way for Neolithic advancements.

- Q2.** *Which region is known for the Sun Temple at Katharmal, built in the 9th century CE by the Katyuri kings?*
- (a) Himachal Pradesh
(b) Uttarakhand
(c) Sikkim

(d) Arunachal Pradesh

Q3. Consider the following statements about Sant Ravidas:

1. He is the central figure within the Ravidassia religious movement.
2. The Adi Granth and the Panchvani are the two oldest attested sources of the literary works of Ravidas.

Which of the above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q4. The recently seen news reports mentioning 'Subika Paintings' are associated with the cultural heritage of which community?

- (a) Gond Tribes
- (b) Meitei Community

(c) Santhal Tribes

(d) Bodo Tribes

Q5. The Martand Sun Temple, an architectural marvel recently in the news for conservation efforts, is primarily associated with which dynasty?

- (a) Chalukya Dynasty
- (b) Chola Dynasty
- (c) Karkota Dynasty
- (d) Gupta Dynasty

Q6. The architectural marvel known as the "Charminar" is located in the same city as the tomb of which historical figure?

- (a) Jahangir
- (b) Ibrahim Lodi
- (c) Mohammed Quli Qutb Shah
- (d) Tipu Sultan

ANSWERS: 2) b, 3) c, 4) b, 5) c, 6) c

9. GEOGRAPHY & DISASTER MANAGEMENT

9.1 SHORT ARTICLES

Messinian Event

Context

- The Geological Institute of Israel recently uncovered a never-before-known about underwater canyon near Cyprus that dates back to the Messinian Event.

Details:

- The canyon, known as Eratosthenes for the underwater mountain it is near, dates back to the Messinian Event that transpired about 5.5 million years ago.
- The canyon is about 10 km wide and 500 m deep and was buried at the beginning of the Messinian period before the deposition of the salt layer.
- It was created when the level of the **Mediterranean Sea decreased at the same time there was a rise in the salinity of the water**, which created gravity currents or dense solutions that caused the destabilization of the submarine slopes and subsidence of the seabed.



About Messinian Event:

- The Messinian Event, also known as the **Messinian Salinity Crisis (MSC)**, marked a significant geological episode where the Mediterranean Sea underwent partial or nearly complete desiccation, presenting one of the most severe ecological challenges in Earth's history.
- Beginning around **6 million years ago (MYA)** and lasting until approximately **5.3 MYA**, this event unfolded due to a series of geological and climatic factors.

Initiation (6 MYA - 5.3 MYA)

- The MSC commenced as the **connection between the Atlantic Ocean and the Mediterranean Sea was severed**.
- This separation resulted from a combination of lowered global sea levels and tectonic plate collision between Europe and Africa, causing the land to uplift.

Evaporation and Canyon Formation

- With reduced water influx from the Atlantic, the Mediterranean experienced intense evaporation.
- This led to the formation of a **colossal underground canyon, surpassing the size of the Grand Canyon, with depths reaching up to 2,000 meters (6562 feet)**. Simultaneously, rivers carved deep incisions into the basin floor.

Salt Deposition

- As the Mediterranean water **evaporated**, salts, primarily **Halite and Gypsum**, were left behind, accumulating in layers on the basin floor.

- Some salt deposits reached **depths of 800 meters (2,500 feet)**. However, the salt deposition couldn't match the pace of water evaporation, resulting in highly saline remaining water.

Deadly Salinity

- The escalating salinity rendered the **Mediterranean inhospitable for marine life**, creating one of the most severe ecological crises in Earth's history.
- The heightened salt content contributed to the demise of marine organisms in the region.

Desiccation Continues

- The desiccation process persisted relentlessly, causing the Mediterranean to shrink until it approached complete dehydration.
- The drastic reduction in water levels further intensified the salinity, exacerbating the ecological challenges.

Zanclean Flood (5.3 MYA)

- The Messinian Crisis concluded dramatically with the Zanclean flood. The Atlantic Ocean, reunited with the **Mediterranean through a breached barrier, flooded the basin, restoring water levels** and concluding this remarkable geological episode.

Aral Sea Shrinking

Context

- Climate change is accelerating the "decades-long demise" of the Aral Sea, impacting surrounding ecosystems and livelihoods.

Details:

- The rapid shrinking of the Aral Sea, once the fourth largest lake in the world, is a complex environmental and humanitarian issue with significant geographic, economic, and social consequences.



Current Situation:

- Located between Kazakhstan and Uzbekistan, the Aral Sea has lost over 90% of its water volume since the 1960s due to the diversion of its feeder rivers, the Amu Darya and Syr Darya, for irrigation projects.

This diversion resulted in:

- **Ecological Devastation:** The exposed lakebed, now known as the Aral Karakum desert, contributes to dust storms, harming soil fertility and human health. The salinity of the remaining water has increased, causing fish populations to collapse and biodiversity to plummet.
- **Economic Hardship:** The fishing industry, once a vibrant source of livelihood, has virtually disappeared. Communities are struggling with job losses, poverty, and decreased access to clean water.
- **Health Problems:** Dust storms from the Aral Karakum desert spread respiratory illnesses and eye problems. Increased salinity further impacts drinking water availability and quality.



Atlantic Meridional Overturning Circulation (AMOC)

Context

- Gulf Stream Could Collapse as Early as 2025, Mini Ice Age on The Way: Study.

Details:

- **Gulf Stream:** The Gulf Stream is a significant ocean current with profound impacts on climate, weather, and marine ecosystems. Originating in the **Gulf of Mexico**, it traverses the **Atlantic Ocean**, influencing regions along its path from North America to Europe.



About AMOC:

- The Atlantic Meridional Overturning Circulation (AMOC), often referred to as the "ocean conveyor belt," is a crucial system of ocean currents that plays a significant role in shaping global climate.

The Mechanics:

- **Warm, salty surface currents:** Driven by winds and the Earth's rotation, warm and salty water originates in the tropics near the equator and flows northward in the Atlantic Ocean. This warm water carries a tremendous amount of heat, acting as a natural heat distributor for the planet.
- **Cooling and sinking:** As the warm water reaches the colder regions of the North Atlantic, particularly near the **Nordic Seas and Greenland**, it loses heat to the atmosphere. This cooling process increases the water's density, causing it to sink towards the ocean floor.
- **Deep southward flow:** This dense, cold water then travels southward along the ocean floor, carrying heat and nutrients at various depths.
- **Upwelling and completion of the loop:** Eventually, the deep current reaches the equator, where warmer temperatures and mixing with other water masses cause it to rise back towards the surface. This completes the loop, forming the continuous conveyor belt of the AMOC.

Current status:

- Scientists have observed a weakening of the AMOC in recent decades, potentially due to climate change factors like:
- **Melting glaciers and freshwater influx:** Freshwater from melting glaciers can weaken the density difference driving the sinking motion in the North Atlantic.
- **Warming temperatures:** Ocean warming can reduce the density difference and hinder the sinking process.



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Floodplain

Context

- The high-level committee for Yamuna's rejuvenation has set a target for the floodplain's demarcation.

Details:

- The high-level committee for Yamuna's rejuvenation has set a target of April 18 for the floodplain's demarcation. The ground verification by revenue teams led by DDA and MCD is likely to be completed by March 18.

About floodplain:

- A floodplain is a generally flat area of land adjacent to a river or stream that experiences periodic flooding. It stretches from the banks of the river channel outwards, reaching the base of the enclosing valley.

Formation:

- Deposition:** Most floodplains are formed by the deposition of sediments carried by the river during floods. These sediments are typically clays, silts, sands, and gravels.
- Lateral Movement:** As a river meanders, it erodes the outer bank of a bend and deposits sediments on the inner bank. This process, called lateral

accretion, gradually builds up the floodplain on one side while eroding the opposite bank.

Types of Floodplains:

- Active Floodplain:** This is the area that is regularly flooded during high-water events. It typically has features like sandbars, natural levees (elevated areas along the riverbank), and oxbow lakes (horseshoe-shaped lakes formed when a meander is cut off from the main channel).
- Inactive Floodplain:** This is the area that is flooded less frequently, often during major floods. It may be higher in elevation and have different soil characteristics than the active floodplain.

Importance of Floodplains:

- Flood Control:** Floodplains act as natural buffers, absorbing floodwaters and reducing the risk of flooding in downstream areas.
- Nutrient-rich Soil:** The deposited sediments in floodplains are often fertile and well-suited for agriculture.
- Habitat:** Floodplains provide important habitat for a variety of plants and animals, including fish, birds, and mammals. They are also important breeding grounds for many species.

Permafrost

Context

- As permafrost melts as a result of climate change, it may release more radon, a colorless, odorless gas linked with lung cancer.

About Permafrost:

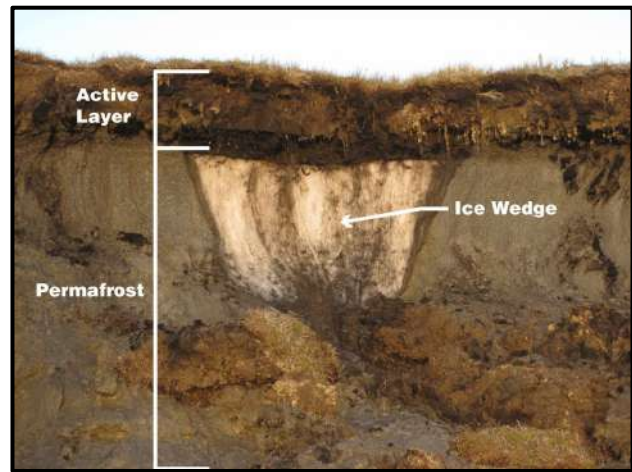
- Permafrost, found predominantly in polar regions and high-altitude areas, is a vital component of Earth's cryosphere. It consists of soil, sediment, and rock that remains frozen year-round, often for centuries or even millennia.



- This frozen ground profoundly influences various environmental processes, from regulating hydrology and shaping landscapes to preserving ancient ecosystems and cultural artifacts.

Location and Formation:

- Widespread:** Permafrost covers about one-quarter of the Northern Hemisphere, including vast areas of Alaska, Siberia, Canada, Greenland, and high mountain regions.
- Temperature Threshold:** It forms and persists where the ground temperature remains below 0°C (32°F) for at least two consecutive years.



Types of Permafrost:

- Continuous Permafrost:** This is the most extensive type, where the entire ground is frozen year-round.
- Discontinuous Permafrost:** Here, permafrost exists in patches, with unfrozen areas in between.
- Sporadic Permafrost:** In these regions, permafrost occurs only in very specific locations with particularly cold microclimates.



Depth and Composition:

- Depth Variations:** Permafrost can range in depth from a shallow meter to over 1,500 meters (4,900 ft).
- Composition:** It's a mixture of soil, ice, and sometimes organic matter like dead plants.

9.2 1 MAINS & 5 MCQs

Q1. Discuss the role of floodplains in hydrological processes and their significance in flood risk management, considering both natural and anthropogenic factors.

Approach:

- Introduction: Define floodplains and their importance.
- Natural role: Explain how floodplains store and convey floodwaters, reducing peak flows.
- Anthropogenic impacts: Discuss human alterations to floodplains, such as urbanization and levees.
- Flood risk management: Evaluate strategies like floodplain zoning and restoration.
- Conclusion: Summarize the critical role of floodplains in hydrological processes and flood risk mitigation.

Q2. The underwater canyon, known as Eratosthenes recently discovered in which of the follow sea or ocean?

- (a) South China Sea
- (b) Mediterranean Sea
- (c) Arctic Ocean
- (d) Adriatic Sea

2. Permafrost can be found in regions with cold climates such as the Arctic, Antarctic, and high mountain ranges.

Which of the above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q3. Consider the following statements about permafrost:

- It refers to a type of ground that remains continuously frozen for two or more years.

Q4. What is the primary characteristic of a floodplain?

- (a) It consists of elevated landforms prone to erosion during heavy rainfall.
- (b) It is an area where rivers deposit sediment during periods of flooding.
- (c) It is a region with a high concentration of industrial infrastructure.
- (d) It is a designated zone for controlled flooding to mitigate downstream risks.

Q5. What is the significance of the Messinian Event in geological history?

- (a) It marked the beginning of the Pleistocene epoch
- (b) It led to the formation of the Himalayan mountain range

- (c) It caused a widespread extinction event among marine species
- (d) It resulted in the desiccation of the Mediterranean Sea and the formation of massive salt deposits

Q6. What is the primary function of the Atlantic Meridional Overturning Circulation (AMOC)?

- (a) Enhancing marine biodiversity in the Atlantic Ocean
- (b) Regulating global precipitation patterns
- (c) Facilitating international shipping routes
- (d) Influencing climate by redistributing heat around the Earth.

ANSWERS: 2) b, 3) c, 4) B, 5) D, 6) D

10. PLACES IN NEWS

10.1 IN INDIA

PONMUDI HILLS

Details

- Researchers discovered a new damselfly species, the Cliffside Bambootail (*Phylloneurarupestris*), in Kerala's Ponmudi hills.
- The hills are part of the Western Ghats mountain range, which runs parallel to the western coast of India.
- The hills are adorned with a variety of plant species, including exotic orchids, rare herbs, and medicinal plants.
- The dense forests harbour diverse wildlife, such as elephants, tigers, leopards, deer, and numerous species of birds and butterflies. Endangered species like the NilgiriTahr, an endemic mountain goat, can also be found in the surrounding areas.
- Some notable waterfalls include Meenmutty Falls, Peppara Falls, and Golden Valley Falls.

THANTHAI PERIYAR WILDLIFE SANCTUARY

Details

- The Tamil Nadu government officially declared the ThanthaiPeriyar Wildlife Sanctuary as the 18th wildlife sanctuary in the state.
- The sanctuary is strategically positioned in the Eastern Ghats, merging with the Western Ghats at the Nilgiris.
- The National Tiger Conservation Authority has identified the sanctuary as a tiger corridor.
- The sanctuary is part of the Nilgiris Elephant Reserve.
- The highest point in the sanctuary, the Bargur Hills, reaches an elevation of over 1,800 meters.
- The Periyar River, the longest river in Kerala, and the Pamba River pass through the sanctuary.
- The Paliyar tribe, a small indigenous community, traditionally inhabits the forests within the Sanctuary.

CORBETT TIGER RESERVE

Details

- Five people have been killed by tigers near Corbett Tiger Reserve in two months, highlighting the growing conflict between humans and the increasing tiger population.
- Established in 1936, Corbett Tiger Reserve is the oldest national park in India and a UNESCO World Heritage Site. Named after the legendary hunter-turned-conservationist Jim Corbett.
- Situated in the foothills of the Himalayas, in the Nainital district of Uttarakhand. Initially established to protect the Bengal tiger population.
- The Ramganga River (a tributary of the Ganges) forms the eastern boundary, while the Sonani River and Kosi River flow through the reserve.
- The highest point, Dhikala, reaches an elevation of 1,060 meters.

DACHIGAM NATIONAL PARK

Details

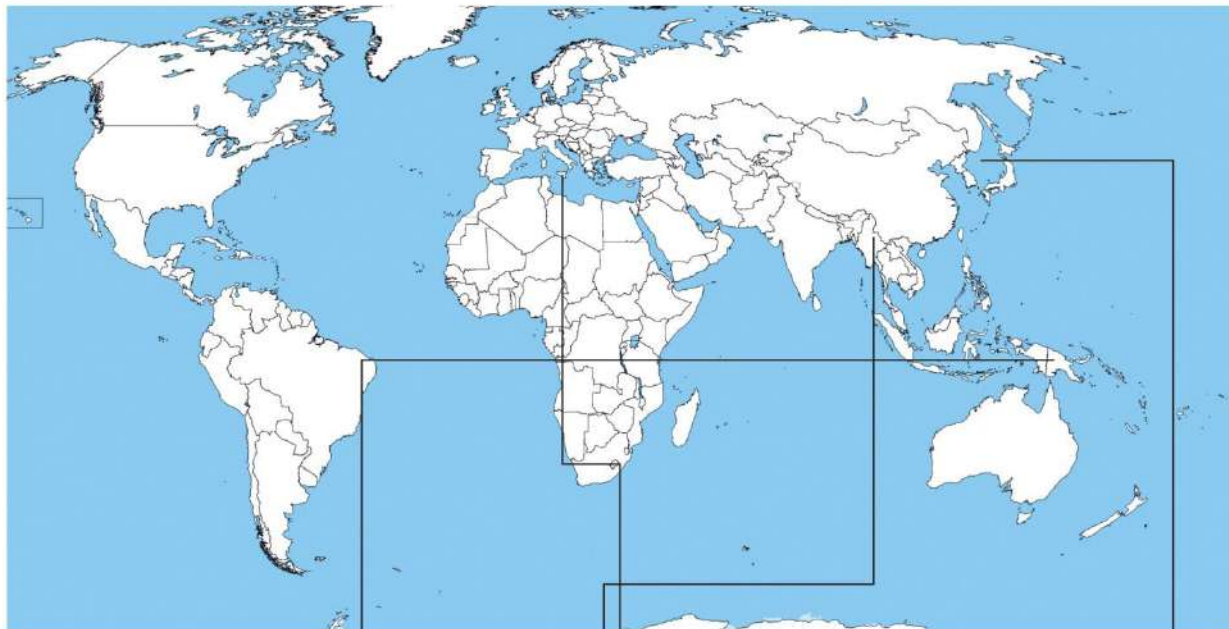
- Heavy snowfall and cold weather limited natural food sources for the bears in Dachigam National Park.
- Established in 1910, Dachigam National Park is one of the oldest wildlife sanctuaries in India.
- It was initially designated to protect the Hangul or Kashmir stag.
- Located in the Zabarwan Range of the western Himalayas, the park boasts a diverse topography.
- Its altitude ranges from 1600 to 4200 meters above sea level, featuring gently sloping grasslands, sharp rocky outcrops, cliffs, and alpine meadows.
- The Dagwan River, sourced from the Marsar Lake within the park, flows through the park and provides water to the Sarband Reservoir, a vital source of drinking water for Srinagar.

KEN RIVER

Details

- The Prime Minister emphasized the extensive use of technology in various parts of the country for wildlife conservation. He specifically mentioned the use of drones to monitor crocodiles in the Ken River.
- The Ken River originates near the Barner Range in Katni district, Madhya Pradesh and travels a distance of 427 km, before merging with the Yamuna at district Banda in Uttar Pradesh.
- Sonar River is its largest tributary. Along its course, it receives water from its own tributaries such as Bawas, Dewar, Kaith, Baik, Kopra, Bearma.
- Out of its total length, it flows for 292 kilometres in Madhya Pradesh, 84 kilometres in Uttar Pradesh, and 51 kilometres forms the boundary between the two states.
- Crossing the Bijawar-Panna hills, the Ken Valley separates the Rewa Plateau from the Satna Plateau.
- The Ken River passes through Panna National Park.
- The "Shajar" stone, a type of sandstone found along the Ken River, is known for its unique properties and used in construction.

10.2 IN WORLD



PAPUA NEW GUINEA

Details

- Riots broke out in February 2024 in Port Moresby, Papua New Guinea.
- Papua New Guinea (PNG) occupies the eastern half of the island of New Guinea, located north of Australia in the southwestern Pacific Ocean. It includes hundreds of smaller islands.
- Dense rainforests cover much of the nation, while river systems like the Fly and Sepik create vast lowlands.
- Exceptionally diverse, with over 800 distinct tribes and language groups.
- Abundant in natural resources like gold, copper, oil, natural gas, and timber.
- Despite resources, PNG is among the least developed countries in Oceania, with much of the population engaged in rural subsistence agriculture.



SEA OF JAPAN

Details

- North Korea fired multiple cruise missiles into the Sea of Japan. This is part of a recent series of tests by North Korea, which has raised concerns in the region and internationally.
- It is also known as the East Sea and is located in the northwest Pacific Ocean. It is enclosed by four main countries: Japan to the east, Russia to the west, North Korea to the northwest, and South Korea to the southwest.
- It connects to the Pacific Ocean through the Tsushima Strait in the south and the La Perouse Strait in the northeast.
- It experiences both warm and cold currents. The Tsushima Current, a warm current, flows northward from the East China Sea, while the Liman Cold Current comes from the Arctic Ocean.
- The sea has been an important fishing ground for centuries, and commercial fisheries play a significant role in the economies of the surrounding countries.



MEKONG RIVER

Details

- The construction of the Luang Prabang Dam in Laos is a highly controversial project with significant social, environmental, and cultural implications.
- Luang Prabang's UNESCO World Heritage status and tourism industry rely heavily on the Mekong River's natural beauty and cultural significance.
- The Mekong River is the 12th longest river in the world. It is also the 7th longest river in Asia with an estimated length of 4,909 km.
- Its vast drainage basin covers parts of China, Myanmar, Laos, Thailand, Cambodia, and Vietnam.
- The Mekong's journey begins in the Tibetan Plateau, where it's known as the Lancang. Finally, it spreads into the vast Mekong Delta before emptying into the South China Sea.

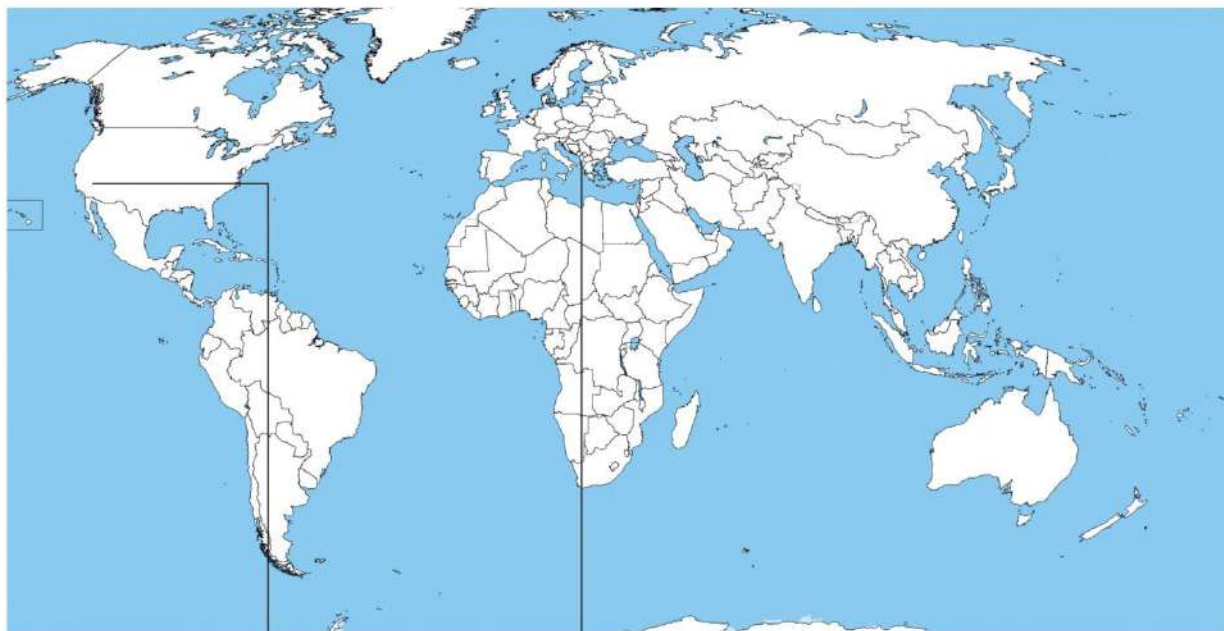
MALTA

Details

- Malta recently joined the International Solar Alliance (ISA) as the 119th member country.
- Malta, officially known as the Republic of Malta, is an island nation in the central Mediterranean Sea, south of Sicily, Italy.
- The islands are rocky and hilly, with a typical Mediterranean climate. Summers are hot and dry, while winters are mild and wet.
- Malta is a popular tourist destination, known for its beautiful beaches and clear waters. Some of the most popular beaches include Melliea Bay, Golden Bay, and Paradise Bay.
- Malta's economy is based on tourism, manufacturing, and financial services. The island has become a popular destination for offshore businesses and retirees.



10.2 IN WORLD



DEATH VALLEY

Details

- Badwater Basin in Death Valley, known as North America's driest region, has transformed into an ephemeral lake (a temporary body of water that appears and disappears over time).
- Death Valley is a vast desert valley located in Eastern California, bordering the Great Basin Desert.
- The valley's basin sits at 86 meters below sea level, making it the lowest point in North America.
- Animal species like desert bighorn sheep, coyotes, kit foxes, and even kangaroo rats have found ways to thrive in the valley.
- The Timbisha tribe, also known as the Panamint Shoshone, is the indigenous people of Death Valley.










ALBANIA



Details

- Albania announced to opening its embassy in New Delhi as a response to India's decision to establish a mission in Tirana, Albania's capital.
- Albania, officially the Republic of Albania, is a country located in Southeast Europe, bordering the Adriatic and Ionian Seas within the Mediterranean Sea.
- Bordered by Montenegro to the northwest, Kosovo to the northeast, North Macedonia to the east, and Greece to the south.
- Major mountain ranges include the Albanian Alps, the Korab Mountains, the Pindus Mountains, the Ceraunian Mountains and the Skanderbeg Mountains.
- In the northwest, Albania is home to Lake Shkodër, the largest lake in Southern Europe.
- Albania's economy is undergoing a period of transition, with a growing focus on tourism, agriculture, and hydropower. The country is also rich in natural resources, including copper, chromium, and nickel.



11 READ MORE

Topic	Why in News	QR Code
Coal Mines Provident Fund Organization	The Union Minister inaugurated the C-CARES web portal of CMPFO, developed and designed by C-DAC, an R&D organization under the Ministry of Electronics and Information Technology.	
State Anthem of Meghalaya	The newly launched Meghalaya state anthem has sparked controversy due to the exclusion of the Jaintia or Pnar language.	
Animal Husbandry Infrastructure Development Fund (AHIDF)		
Electoral Bonds	The Supreme Court, in a unanimous landmark judgment, declared the electoral bonds scheme, providing anonymous political donations, and legal amendments enabling unlimited contributions by corporations, as "unconstitutional and manifestly arbitrary."	
National Commission for Scheduled Castes	The National Commission for Scheduled Tribes has issued notices to the Centre and the West Bengal government, seeking reports on child marriage, human trafficking, human-wildlife conflict, and corruption in the Sundarbans region.	
Northern Ireland	The recent resolution of the political crisis in Northern Ireland (a part of the United Kingdom) involved the establishment of a new power-sharing agreement between unionists and nationalists, bringing an end to the two-year deadlock.	
Ladakh's Demand of Sixth Schedule	Following talks with civil society leaders, the Union Government has decided to evaluate the application of the Sixth Schedule of the Constitution in Ladakh. The Sixth Schedule, under Article 244 of the Constitution, aims to protect tribal communities.	

Topic	Why in News	QR Code
Financial Devolution in India	Several Indian states are raising concerns about the current system of financial devolution from the central government. They allege that the system is unfair and doesn't allocate them their rightful share of tax revenue.	
Aral Sea	The Aral Sea, formerly a vast inland lake between Kazakhstan and Uzbekistan, has drastically diminished to less than a quarter of its original size due to climate change and mismanaged human engineering and agricultural projects.	
Annual Death Penalty Report 2023	The "Death Penalty in India: Annual Statistics Report" by Project 39A offers valuable insights into the current state of capital punishment in India.	