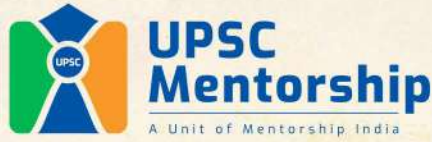


AUGUST 1ST
EDITION 2024



BI-WEEKLY EDITION

THE MIB | MENTORSHIP INDIA BI-WEEKLY

THE UNSUNG PATRIOTS



SOURCES



A Current Affairs Magazine from Mentorship India

Dear Students

The Mentorship India Bi-weekly is our half-monthly publication for staying updated on the latest developments shaping India and the World. Crafted with precision by our mentors, it serves as a comprehensive resource for students preparing for competitive exams. Offering insightful analysis, in-depth coverage, and strategic insights aligned with the exam syllabus, it empowers aspirants to navigate through contemporary issues with confidence. From breaking news to nuanced perspectives, our magazine transforms complex topics into easily digestible notes, ensuring every reader gains a holistic understanding of current affairs. Join us on a journey of knowledge enrichment and exam preparation excellence with our Bi-weekly Current Affairs.

FEATURES

- **MIB THEME BI-WEEKLY**
 - A comprehensive coverage of the most important bi-weekly topic.
- **MAINS IN-DETAIL BI-WEEKLY**
 - The in-depth coverage of issue that carry most probability to be asked in the Exam.
- **PRELIMS IN-BRIEF BI-WEEKLY**
 - Subject-wise reading notes of most expectable themes from Prelims point-of-view.
- **SELF EVALUATION BI-WEEKLY**
 - An assignment containing 25 Prelims Questions and 5 Mains Questions for your self-evaluation
- **SOLVED ESSAY BI-WEEKLY**
 - A Previous Year Solved Philosophical Essay to give student an extra edge on others.

FROM THE EDITORS

Do you Overthink?

Juggling endless study materials, strategizing for the next test, and constantly evaluating your progress – the UPSC journey is a mental marathon. But amidst this whirlwind, are you a victim of overthinking?

Critical thinking is essential for success in the Civil Services exam. It helps you analyze information, form strong arguments, and craft compelling answers. However, overthinking turns this strength into a weakness. It breeds self-doubt, paralyzes action, and fuels anxiety. Imagine missing deadlines, getting overwhelmed during exams, or losing focus due to constant "what ifs." Not the ideal recipe for cracking UPSC, right?

So, how do you conquer this? Start with mindfulness. Take breaks, meditate, and let your mind relax. Set realistic goals, break your study material into manageable chunks, and tackle them one at a time. Trust in your preparation, and remember, perfection is a myth. Mistakes are just stepping stones to success.

Remember, we, your mentors, are here to guide you every step of the way. Don't let overthinking dim your determination. You have the potential to excel – now go out there and prove it!

Team

UPSC Mentorship



TABLE OF CONTENTS

THE MIB THEME BI-WEEKLY	3	<i>Challenges in Organ Transplantation.....</i>	13
UNsung HEROES OF INDIA	3	<i>Recommendations for Strengthening Organ Donation</i>	
78th Independence Day	3	<i>in India</i>	13
Key Highlights of the Independence day:	3	<i>Global Perspectives and Best Practices</i>	13
THE LOST STORIES OF FORGOTTEN FIGHTERS OF INDIAN		<i>Conclusion</i>	13
INDEPENDENCE	3	CORPORATE GOVERNANCE IN AI COMPANIES	14
Raghubar Dayal Srivastava	3	<i>Background</i>	14
Sangram Singh	4	<i>Current Governance Issues.....</i>	14
Sher Singh Shah	4	<i>Concerns / Challenges.....</i>	14
Sivagami Ammayar.....	5	<i>International Practices in Corporate Governance for AI</i>	
Karu Bhagat	5	14
Kanta Singh	5	<i>Way Forward.....</i>	15
Thogi Ram Sut	6	<i>Conclusion</i>	15
Srijukta Bhogeswari Phukanani.....	6	DNA PROFILING IN THE JUSTICE SYSTEM	16
Dariki Nath	6	<i>DNA Profiling</i>	16
Golap Nath.....	7	<i>DNA as the Blueprint of Life</i>	16
Honoring Their Legacy	7	<i>Sources of DNA</i>	16
Reflecting on Their Impact	7	<i>Special Considerations</i>	16
MAINS IN-DETAIL BI-WEEKLY.....	8	<i>Applications of DNA Fingerprinting.....</i>	16
LANDSLIDES IN WAYANAD	8	<i>Legal Applications of DNA Profiling</i>	17
What are Landslides?.....	8	<i>Legal Provisions for DNA Profiling in India</i>	17
Types:.....	8	<i>Judicial Precedents.....</i>	17
The Landslide Atlas of India by ISRO:	8	<i>Way Forward.....</i>	18
Major Landslide-Prone Areas in India:	8	INDIA, VIETNAM RELATIONS	19
Major Landslides in India	9	<i>What are the Key Highlights of the Bilateral Meeting?</i>	
What are the Causes of Landslides?	9	19
How do Landslides in the Western Ghats Differ from		<i>What is the Present Status of India-Vietnam Relations?</i>	
Those in the Himalayan Region?	9	19
What are the Challenges Associated with Landslides?		<i>What are the Challenges in India-Vietnam Relations?</i>	
.....	10	20
What are the Government Initiatives to Mitigate		<i>Way Forward.....</i>	21
Landslide Risks in India?.....	10	PRELIMS IN-BRIEF BI-WEEKLY	22
What Measures can be Taken to Prevent Landslides		HISTORY.....	22
Hazards?	10	National Culture Fund.....	22
Soil Nailing and Hydroseeding for Landslide Prevention		Vattezhuthu Script.....	22
.....	11	Bharatanatyam.....	22
Conclusion:.....	11	Bagata Tribe	22
THE NATIONAL ORGAN AND TISSUE TRANSPLANT ORGANISATION		Thadou people	22
(NOTTO) ANNUAL REPORT 2023-24	12	GEOGRAPHY	22
Organ Donation:.....	12	Millets.....	22
Organ donation refers to when an individual allows		Ganga River	22
his/her organ(s) to be removed, legitimately, with		Kali River (Kaali Nadi).....	23
their consent while they are alive or with the consent		Krishna River	23
of their close relative if the donor is dead. Organs can		Himalayas.....	23
be donated either by living or deceased donors.	12	SCIENCE & TECHNOLOGY.....	23
Aim of Organ Donation Day:	12	Parakh Report.....	23
Milestone in Organ Donation	12	Nano-MIND Technology.....	23
Key Data Highlights from the Report	12	Pumped storage projects	23
Regulatory Framework and Ethical Considerations...13	13	Axiom-4 mission	24
		Polio.....	24
		Alzheimer	24

Tuberculosis.....	24	ECOLOGY & ENVIRONMENT	29
Lithium	24	Eco-Sensitive Zones (ESZ).....	29
Diabetes	25	Elephant.....	29
Chandrayaan 3.....	25	SELF EVALUATION BI-WEEKLY.....	30
Viral encephalitis.....	25	PRELIMS.....	30
POLITY	25	MAINS.....	33
Governor	25	SOLVED ESSAY BI-WEEKLY	34
Preamble	25	SOCIAL MEDIA IS INHERENTLY A SELFISH MEDIUM	34
Minorities	26	<i>Social Media: Navigating Its Dual Nature</i>	<i>34</i>
Prevention of Money Laundering.....	26	<i>The Cult of Self-Presentation</i>	<i>34</i>
CBI.....	26	<i>The Feedback Loop of Validation</i>	<i>34</i>
Enforcement Directorate.....	27	<i>Narcissism and Self-Esteem Issues.....</i>	<i>34</i>
SOCIAL JUSTICE	27	<i>Cultural Reflections of Individualism.....</i>	<i>34</i>
MGNREGA	27	<i>The Competitive Nature of Social Comparison</i>	<i>34</i>
Protection of Children from Sexual Offences (POCSO) Act	27	<i>The Commodification of the Self.....</i>	<i>34</i>
Border Security Force.....	27	<i>Economic Incentives and Attention Economy</i>	<i>35</i>
INTERNATIONAL RELATIONS.....	27	<i>Surveillance Capitalism and Data Exploitation</i>	<i>35</i>
Gaza Strip	27	<i>Materialism and Consumerism.....</i>	<i>35</i>
BIMSTEC	27	<i>Impact on Relationship Quality and Mental Health..</i>	<i>35</i>
India-Bangladesh.....	27	<i>Polarization and Echo Chambers</i>	<i>35</i>
ECONOMY	28	<i>Pathways to Mitigation.....</i>	<i>35</i>
Minimum Support Price	28	<i>Examples of Positive Initiatives.....</i>	<i>36</i>
Consumer Price Index.....	28	CONCLUSION	36
Goods and Services tax.....	28		
SEBI	29		
Capital gain tax	29		

THE MIB THEME BI-WEEKLY

UNSUNG HEROES OF INDIA

India marked its 78th Independence Day on August 15th this year. While the celebrations reflect a sense of pride and achievement, they also evoke a history of immense struggle and sacrifice by numerous Indian freedom fighters who battled British colonial rule to secure the nation's independence

78TH INDEPENDENCE DAY

During the address from the Red Fort on the 78th Independence Day, the Prime Minister outlined a vision for the nation's future. Key highlights included plans to host the 2036 Olympics and the promotion of a Secular Civil Code, underscoring the commitment to national progress and the empowerment of every citizen.

KEY HIGHLIGHTS OF THE INDEPENDENCE DAY:

- **Development Goals:** Aiming to host the 2036 Olympics and implement a Secular Civil Code. Reducing government interference and mandating reforms in institutions to boost progress.
 - **Defense:** Achieving self-reliance and expanding defense manufacturing and exports.
 - **Economy:** Doubling per capita income, enhancing banking reforms, and improving infrastructure to become the third-largest economy.
 - **Agriculture:** Transforming the sector, supporting small farmers, and reviving 60,000 ponds.
 - **Global Affairs:** Organizing major international events and advocating for peace and stability in neighboring regions.
 - **Empowerment:** Focus on uplifting all citizens, improving access to education and healthcare, and addressing poverty.
 - **Education:** Increasing medical seats, promoting higher learning, and investing in research and innovation.
- **Women's Safety:** Expanding self-help groups, increasing maternity leave, and addressing crimes against women.
 - **Industry:** Embracing "Vocal for Local" and "Design in India," with a focus on semiconductor production and expanding global markets.
 - **Railways:** Committing to net-zero carbon emissions by 2030.
 - **Renewable Energy:** Leading in renewable energy achievements and offering free electricity through solar schemes.
 - **Sports:** Preparing to host the 2036 Olympics and training youth in various skills.
 - **Law and Justice:** Moving towards a Secular Civil Code, simplifying laws, and replacing outdated legal systems.

THE LOST STORIES OF FORGOTTEN FIGHTERS OF INDIAN INDEPENDENCE

RAGHUBAR DAYAL SRIVASTAVA

- **Date of Birth:** August 15, 1911
- **Birthplace:** Village Raghupur/Rukumddinpur, P.S. Maharajganj, Pargana Gopalpur, Tehsil Sagri, Distt. Azamgarh
- **Involvement in Freedom Struggle:**
 - Participated in the Satyagraha Movement in 1930 at Police Lines, Azamgarh, led by Shri Sitaram Asthana.

- Arrested and sentenced to 3 months and 4 months imprisonment under IPC Section 447 and Police Act 1922; served full terms without yielding to pressure or torture.
- Actively involved in the Quit India Movement of 1942, providing refuge to targeted freedom fighters.



- **Post-Prison Activism:** Advocated for the reform of the intermediary system in land revenue collection, seeking relief for tenants despite personal risks and financial hardships.
- **Death:** Passed away in 1949 at the age of 38.

SANGRAM SINGH

- **Date of Birth:** 1894
- **Birthplace:** Village Nala, Guptkashi, Block Ukhi, Uttarakhand



- **Father:** Dhani Ram
- **Military Service:** Joined Indian Army in 1924
- **Role in Freedom Struggle:**
 - Actively participated in various independence movements
 - Prominent leader, mobilizing soldiers and civilians
- **Awards and Honors:**
 - 1939–45 Star Medal
 - War Medal
 - India Service Medal
 - Burma Star Queen Sea Badge
- **Social Contributions:** Worked for socio-economic upliftment and welfare
- **Date of Passing:** April 10, 1951

SHER SINGH SHAH



- **Date of Birth:** September 16, 1912
- **Birthplace:** Nala, near Guptkashi, Rudraprayag district
- **Parents:**
 - Father: Padam Singh Shah (farmer and village leader)
 - Mother: Devki Devi
- **Early Life:**
 - Lived and studied in Nala, Ukhi Block
 - Involved in the Indian independence movement from a young age
- **Freedom Struggle Activities:**
 - Delivered messages and leaflets related to the independence movement

- Raised public awareness and appealed for participation in the Quit India Movement (1942)
- Led the movement in Kedar Ghati and collaborated with freedom fighters like Anushoyaprasadbahuguna and Purshottam Bhagwati
- **Arrests and Imprisonment:**
 - Under house arrest in Nala for six months
 - Imprisoned in Bareli jail; endured harsh treatment and deteriorating health
- **Date of Passing:** February 12, 1991

- Rescued bomb-injured people at Sarkar Camp during WWII
- Refused to perform for British officials when the Social Welfare Hostel was captured in 1943
- **Honors:**
 - Awarded "Tyaga Chemmal" by Tamil Nadu government in 1973
 - Honored by Dr. J. Jayalalitha, Tamil Nadu Chief Minister, in 1993

KARU BHAGAT

- **Date of Birth:** Around 1917
- **Birthplace:** Ranipur village
- **Father's Name:** Puneet Bhagat
- **Occupation:** Agriculture
- **Freedom Struggle Involvement:**
 - Active in the 1942 movement near Patna
 - Participated in sabotaging railway lines and telecommunication wires to disrupt British operations
- **Arrest and Imprisonment:**
 - Arrested while working in the fields during Bhado
 - Subjected to harsh conditions in jail, including poor food and physical abuse
 - Denied permission to attend his elder brother Manu Bhagat's last rites
- **Post-Independence:**
 - Received a letter of respect and pension for his contributions
- **Date of Death:** 1993

KANTA SINGH

- **Date of Birth:** 1920
- **Birthplace:** Jaggi Bhagwan village, Ukhi block, Rudraprayag district, Uttarakhand
- **Family:**
 - **Father:** Mohan Singh Rana (farmer)
 - **Mother:** Durga Devi
- **Early Contributions:**
 - Motivated local youth with patriotic speeches
 - Inspired villagers during local fairs
- **Military Career:**
 - Joined Lansdowne as a rifleman on March 9, 1941, with the 5th Garhwal Rifles

SIVAGAMI AMMAYAR



- **Date of Birth:** 1933
- **Birthplace:** Annasagaram village, Dharmapuri district
- **Migration:** Moved to Malaysia with family; father worked on a tea estate
- **Education:** Studied at Jai Hind Hindu Padasalai, Kuala Lumpur
- **Freedom Struggle Involvement:**
 - Joined the Indian National Army's 'Balak Sena' at age 11, inspired by Netaji Subhash Chandra Bose
 - Served as caretaker and head of the social welfare hostel (1942-1945)
 - Performed street play "Veera Vanitha" with her brother, promoting freedom and raising funds for INA
- **Notable Actions:**

- Joined the Azad Hind Fauj on February 15, 1942, due to dissatisfaction with British rule
- Fought with the Azad Hind Fauj from 1941 to 1946
- **Imprisonment:**
 - Imprisoned in Chittagong, Kolkata, or Multan during the struggle
- **Post-War:**
 - Discharged from the army on March 25, 1946
- **Date of Death:** 1984

THOGI RAM SUT

- **Residence:** Barhampur, Nowgong
- **Incident Date:** September 18, 1942
- **Event:**
 - People of Barhampur captured the Shanti Sena camp and held a feast
 - Military arrived; Pratap Chandra Sarma tried to mediate with V.H. Ruse, ICS
 - Sarma and eleven others were arrested and removed in a military van
 - Military trampled the sacred Prasad and used force on the crowd
- **Public Response:**
 - Crowd, infuriated, chanted "Bande Mataram"
 - Srimati Ratnabala Phukan and others from nearby villages, including her mother Srijukta Bhogeswari Phukanani, joined the protest carrying a Congress flag
 - Ratnabala Phukan faced violence from the military while defending the flag
- **Outcome:**
 - Captain Finish and Captain Montgomery fired randomly
 - Thogi Ram Sut and others were killed

SRIJUKTA BHOGESWARI

PHUKANANI

- **Residence:** Barhampur, Nowgong
- **Incident Date:** September 18, 1942
- **Event:**
 - People of Barhampur captured Shanti Sena camp and held a feast

- Military arrived, and Pratap Chandra Sarma tried to mediate with Special Magistrate V.H. Ruse
- Sarma and eleven others were arrested and removed in a military van
- Military trampled the sacred Prasad, causing public outrage
- **Public Response:**
 - Crowd chanted "Bande Mataram"
 - Srimati Ratnabala Phukan and others, including her mother Srijukta Bhogeswari Phukanani, protested with a Congress flag
 - Military blocked their path and Captain Finish attempted to seize the flag
- **Outcome:**
 - Captain Finish and Captain Montgomery fired randomly
 - Srijukta Bhogeswari Phukanani and others were killed

DARIKI NATH

- **Residence:** Dhekiajuli, Assam
- **Affiliation:** Active Congress member
- **Incident Date:** September 20, 1942
- **Event:**
 - Pushpa Das of Tezpur organized a meeting at Boragoan, urging people to protest at the Dhekiajuli police station
 - Approximately 5,000–6,000 people from various areas gathered to hoist the Congress flag
- **Police Response:**
 - Officer in charge Mr. Mohikanta Bora deployed 8 armed police and 6 civil constables
 - Ordered a lathi charge as the procession approached
- **Flag Hoisting:**
 - Leaders Kamala Kanta Das and Panidhar Das led the procession
 - Manbar Nath and Golok Neog managed to hoist the flag inside the police station
 - Manbar was shot and thrown out; Golok's mother was also shot while trying to shield him
- **Aftermath:**

- The crowd attempted to escape but was trapped and pursued by police
- The police, led by Commandant Finch, brutally beat and fired upon the fleeing protesters
- Dariki Nath was seriously injured in the lathi charge and/or firing
- **Legacy:**
 - Dariki Nath played a significant role in the independence movement despite the severe repression

GOLAP NATH

- **Residence:** Dhekiajuli, Assam
- **Affiliation:** Active Congress member
- **Incident Date:** September 20, 1942
- **Event:**
 - Pushpa Das of Tezpur organized a meeting urging a large procession to Dhekiajuli police station
 - Approximately 5,000–6,000 people participated to hoist the Congress flag and demand resignation of government servants
- **Police Response:**
 - Officer in charge, Mohikanta Bora, deployed 8 armed police and 6 civil constables
 - Ordered a lathi charge as the procession arrived
- **Flag Hoisting:**
 - Manbar Nath and Golok Neog successfully hoisted the flag inside the police station
 - Manbar was shot and thrown out; Golok's mother was also shot while trying to protect him
- **Aftermath:**
 - The crowd was trapped and attacked, with many fleeing over a barricaded bridge
 - Mymensinghi and armed police brutally beat and fired upon the fleeing protesters, with about 29 rounds fired

- **Injuries:**
 - Golap Nath was seriously injured during the lathi charge and/or firing
- **Legacy:**
 - Golap Nath played a significant role in the independence movement despite severe repression.

HONORING THEIR LEGACY

The unsung heroes of India's freedom struggle embody the spirit of resistance and sacrifice that was essential for our nation's independence. While their stories may not always be as well-known as those of prominent figures, their contributions were crucial in achieving freedom. As we celebrate Independence Day, it's important to reflect on and honor these extraordinary individuals. Their courage, dedication, and selflessness remind us of the collective effort required to secure our liberty. By acknowledging their sacrifices, we celebrate not only their personal achievements but also the enduring spirit of the countless unsung heroes who played pivotal roles in our nation's history.

REFLECTING ON THEIR IMPACT

Drawing inspiration from these remarkable individuals helps us appreciate the true essence of freedom and sacrifice. Their bravery and resilience continue to light our way, serving as a testament to the values that forged our nation. Honoring their legacy is more than remembering their past; it's about reinforcing our commitment to the principles of unity, justice, and freedom that they fought for. Let their stories inspire us to uphold these ideals and strive for a future where their dreams of a just and equitable society are realized. As we move forward, may their examples of courage and dedication guide us towards a brighter and more inclusive future for all.

MAINS IN-DETAIL BI-WEEKLY

LANDSLIDES IN WAYANAD

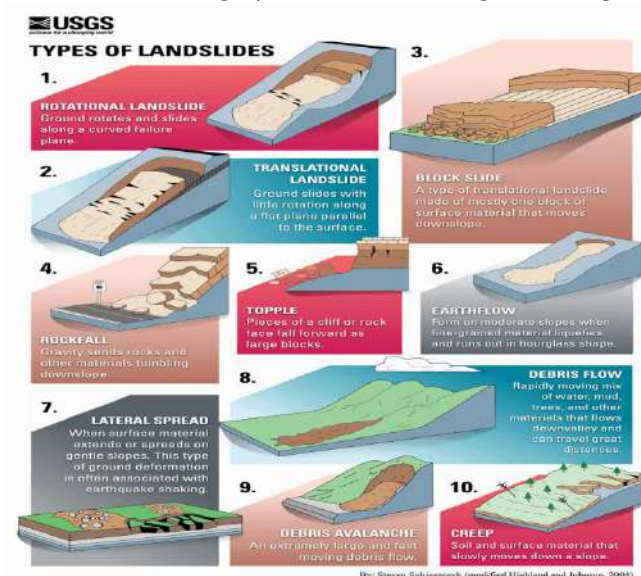
2024 has been marked by landslides around the world. Their frequency is increasing as the impacts of climate change intensify. Plantation farming and extremely heavy rain in Kerala contributed to the Wayanad tragedy.

WHAT ARE LANDSLIDES?

- A landslide is the downward movement of rock, soil, and debris on a slope, ranging from small shifts to large, destructive events.
- It can occur on natural or man-made slopes and is triggered by factors like heavy rainfall, earthquakes, volcanic activity, human activities, and changes in groundwater levels.

TYPES:

- **Slides:** Movement along a rupture surface, including rotational and translational slides.
- **Flows:** Soil or rock mixed with water moving like a fluid, such as earth flows, debris flows, mudflows, and creep.
- **Spreads:** Lateral extension and cracking of the mass, often due to liquefaction.
- **Topples:** Forward rotation and free-fall from a vertical or near-vertical slope.
- **Falls:** Detachment from a steep slope or cliff, descending by free-fall, bouncing, or rolling.

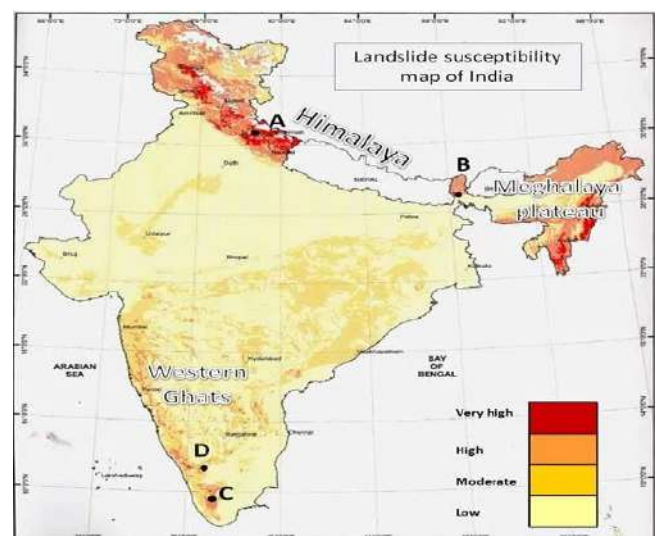


THE LANDSLIDE ATLAS OF INDIA BY ISRO:

- India is among the top 5 landslide-prone countries globally.
- Others are China, US, Italy and Switzerland.
- In India, about 0.42 million sq. km (12.6% of land area) is prone to landslide hazard.
- Reported landslides in India are distributed as follows:
 - 66.5% in the Northwestern Himalayas
 - 18.8% in the Northeastern Himalayas
 - 14.7% in the Western Ghats
- As per the Geological Survey of India, the economic loss due to landslides may amount to as much as 1% to 2% of the Gross National Product (GNP) in many developing countries

MAJOR LANDSLIDE-PRONE AREAS IN INDIA:

- The Northeastern Region (comprising about 50% of the total landslide - prone areas).
- Uttarakhand, Himachal Pradesh, and Jammu & Kashmir along the Himalayas.



- Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu along the Western Ghats.

- The Araku region in Andhra Pradesh along the Eastern Ghats.
- Nearly 17,000 sq km of area in Kerala, mostly on the western side of the Western Ghats, is mapped as landslide-prone.

MAJOR LANDSLIDES IN INDIA

- Kedarnath, Uttarakhand in 2013
- Pettimudi, Kerala in 2020
- Mumbai, Maharashtra in 2021
- Tupal, Manipur in 2022
- Raigarh, Maharashtra in 2023
- Aizawl, Mizoram in 2024
- Shirur, Karnataka in 2024

WHAT ARE THE CAUSES OF LANDSLIDES?

Gravitational Forces

- These are the primary cause of landslides, constantly pulling materials on slopes downward.
- When gravity exceeds the shear strength of geomaterials like rocks, sand, silt, and clay, the slope fails, resulting in the downhill movement of these materials.

Natural Triggers

- **Rainfall:** Prolonged or intense rainfall increases soil water content, reducing cohesion and adding weight to slopes, making them more prone to failure.
 - The terrain in Wayanad has two distinctive layers: a soil layer atop hard rocks. Heavy rainfall saturates the soil with moisture, weakening the force binding the soil to the rocks, triggering landslides.
 - Climate change has also shifted the rain-bearing belt, increasing convective rainfall in southern regions like Wayanad.
- **Earthquakes:** Earthquakes destabilize slopes by shaking the ground and weakening the structural integrity of geomaterials, especially in tectonically active regions like the Himalayas.
- **Erosion:** Natural processes such as river or wave action can erode the base of slopes, undermining their stability. Coastal areas are particularly susceptible to landslides due to wave-induced erosion.

- **Hydrological Factors:** Groundwater movement can contribute to landslide risk. Water can seep through porous materials, increasing pore pressure and reducing effective stress, thereby weakening the slope.
- **Geological Factors:** Geological factors, such as the composition, structure, and weathering state of materials, significantly affect slope stability.
 - The Western Ghats have a fragile ecology with steep slopes and dual-layered terrain, making them prone to landslides when rainwater saturates the soil, increasing its weight and reducing stability.

HOW DO LANDSLIDES IN THE WESTERN GHATS DIFFER FROM THOSE IN THE HIMALAYAN REGION?

Region	Causes
Western Ghat	<ul style="list-style-type: none"> • Concentrated rainfall • Overburdening of hills • Mining and quarrying • Anthropogenic activities such as agricultural activities, windmill projects, etc. • Forest fragmentation with dense vegetation on thin soil

Himalayas	<ul style="list-style-type: none"> • High seismicity due to plate tectonic movement • Easily erodible sedimentary rocks • Young and energetic rivers (Ex: Ganga, Yamuna, Jhelum etc.) with high erodibility • Heavy downpour and snowfall • Anthropogenic factors such as deforestation, jhum cultivation, road construction, etc.
------------------	---

WHAT ARE THE GOVERNMENT INITIATIVES TO MITIGATE LANDSLIDE RISKS IN INDIA?

- **National Landslide Risk Management Strategy (2019):** It is a comprehensive strategy addressing hazard mapping, monitoring, early warning systems, awareness programs, capacity building, policies, and stabilisation measures.
- **Landslide Risk Mitigation Scheme (LRMS):** This scheme under preparation, aims to provide financial support for tailored landslide mitigation projects in vulnerable states, focusing on disaster prevention, mitigation strategies, and research and development for monitoring critical landslides.
 - This initiative will contribute to the establishment of an Early Warning System (EWS) and enhance capacity-building efforts.
- **Flood Risk Mitigation Scheme (FRMS):** A forthcoming scheme for developing flood shelters, river basin-specific early warning systems, and digital elevation maps for flood preparedness and evacuation.
- **National Guidelines on Landslides and Snow Avalanches:** Guidelines by National Disaster Management Authority (NDMA) covering hazard assessment, risk management, structural and non-structural measures, institutional mechanisms, financial arrangements, and community participation.
- **Landslide Atlas of India:** It is a detailed resource that documents landslide events in the country's vulnerable areas and includes damage assessments for certain sites. Developed by the National Remote Sensing Centre (NRSC) under Indian Space Research Organisation (ISRO), it offers important information and insights related to landslides in India.

WHAT ARE THE CHALLENGES ASSOCIATED WITH LANDSLIDES?

- **Loss of Life and Injury:** Landslides can result in fatalities and serious injuries to individuals in affected areas. The sudden nature of landslides often leaves little time for evacuation.
- **Displacement of Communities:** Landslides can lead to the displacement of populations, forcing communities to relocate. This can disrupt social structures and lead to long-term socio-economic challenges.
- **Damage to Infrastructure:** Critical infrastructure such as roads, bridges, and buildings can be severely damaged or destroyed, leading to significant economic losses and hampering rescue and relief operations.
- **Economic Impact:** The cost of repairing damaged infrastructure and providing humanitarian aid can be substantial. Additionally, landslides can disrupt local economies, particularly in areas reliant on agriculture and tourism.
- **Environmental Degradation:** Landslides can lead to soil erosion, loss of vegetation, and habitat destruction, adversely affecting biodiversity and ecosystem services.

WHAT MEASURES CAN BE TAKEN TO PREVENT LANDSLIDES HAZARDS?

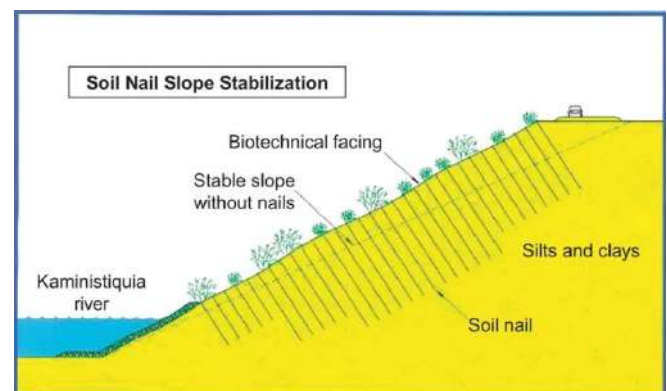
- **Building Resilience:** This involves setting up a network of sensors for real-time monitoring and data collection.
 - Assessment of rainfall thresholds for soil saturation in different areas.

- Mapping out the routes that landslides are likely to take after being triggered.
- Creating route maps to mark areas that should be out of bounds for settlements or activities.
- **Harnessing Technology for Vigilant Monitoring:** Utilise web-based sensors like rain gauges, piezometers, inclinometers, extensometers, InSAR (Interferometric Synthetic Aperture Radar), and total stations to monitor vulnerable areas, focusing on densely populated and urbanised zones.
- **Integrated EWS:** Develop a comprehensive EWS using Artificial Intelligence (AI) and Machine Learning (ML) algorithms to predict and alert communities about impending hazards, providing valuable time for precautionary measures.
- **Sustainable Socio-Economic Progress:** Recognise the region's valuable natural resources, such as glaciers, springs, minerals, energy sources, and medicinal plants, for sustainable socio-economic development. Balance resource utilisation with ecological conservation for long-term viability.
- **Environmental Considerations:** There is a need to safeguard ecosystems through sustainable practices and responsible resource use.
 - Implement thoughtful urban planning in mountainous areas, restricting extensive construction and managing drainage and slope excavation scientifically.
 - Use retaining walls to support soil and restore ecological balance through reforestation and soil conservation efforts.
- **Building Codes and Evaluation:** There is a need to map towns and assess load-bearing

capacities to develop robust building codes for safe construction in hazard-prone areas. Enforce strict land use restrictions in these areas to prevent activities that could destabilise the soil.

SOIL NAILING AND HYDROSEEDING FOR LANDSLIDE PREVENTION

- The State highways department in Kerala is tackling landslide issues in the Nilgiris with soil nailing and hydroseeding.
- Soil nailing reinforces soil, while hydroseeding promotes plant growth with a mix of seeds, fertiliser, and water.
- This approach includes planting five grass species and maintaining the vegetation to reduce the environmental impact of road infrastructure.



CONCLUSION:

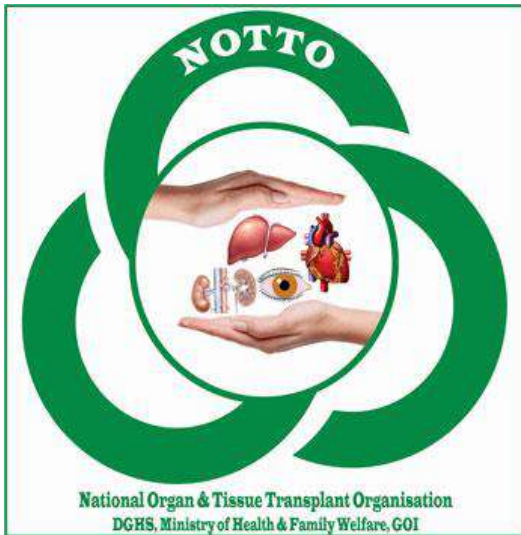
The Wayanad landslides serve as a stark reminder of the interplay between natural disasters and human activities. A multifaceted approach involving regulation, education, and scientific research is essential to mitigate the risks and protect vulnerable communities in the future.

THE NATIONAL ORGAN AND TISSUE TRANSPLANT ORGANISATION (NOTTO) ANNUAL REPORT 2023-24

On August 3, 2024, Indian Organ Donation Day, NOTTO released its 2023-24 annual report, marking a significant milestone in India's organ donation progress. The report highlights key achievements and ongoing challenges in the field.

ORGAN DONATION:

ORGAN DONATION REFERS TO WHEN AN INDIVIDUAL ALLOWS HIS/HER ORGAN(S) TO BE REMOVED, LEGITIMATELY, WITH THEIR CONSENT WHILE THEY ARE ALIVE OR WITH THE CONSENT OF THEIR CLOSE RELATIVE IF THE DONOR IS DEAD. ORGANS CAN BE DONATED EITHER BY LIVING OR DECEASED DONORS.



AIM OF ORGAN DONATION DAY:

- To raise awareness about the significance of organ donation and to encourage more people towards organ donation in their life.
- In 2024, the "Angdaan Jan Jagrukta Abhiyaan" was launched, dedicating the entire month of July as Organ Donation Month to promote various awareness activities.



MILESTONE IN ORGAN DONATION

In 2023, India achieved a historic milestone by surpassing 1,000 deceased organ donors in a single year for the first time. This achievement reflects the growing awareness and willingness among citizens to donate organs, breaking the previous record set in 2022. The number of deceased-donor transplants has significantly increased from 837 in 2013 to 2,935 in 2023.

KEY DATA HIGHLIGHTS FROM THE REPORT

- **Gender Distribution of Donors:**
 - **Living Donors:** 63% of living donors were women, reflecting the societal trends where women often donate organs, especially kidneys, to family members.
 - **Deceased Donors:** 77% of deceased donors were men, highlighting a significant gender disparity in organ donation after death.
- **Regional Distribution of Transplants:**
 - **Delhi-NCR:** Nearly 78% of transplants for foreign nationals were conducted in this region.
 - **Delhi:** A total of 4,426 transplants were performed, with over 32% of these involving foreign nationals.
 - **Rajasthan:** 116 transplants were conducted for foreign nationals.
 - **West Bengal:** 88 transplants involved foreign nationals.
- **Transplants Involving Unrelated Deceased Donors:**
 - Nine transplants were performed using organs from unrelated deceased donors, with locations spread across Tamil Nadu, Delhi, Maharashtra, and Gujarat.

- Foreign nationals received these organs only when no matching Indian patients were available.
- **Organ Donation Rate:**
 - Despite the progress, India's organ donation rate remains less than 1 per million population, indicating a significant gap compared to global standards.

REGULATORY FRAMEWORK AND ETHICAL CONSIDERATIONS

- The 1994 Transplantation of Human Organs and Tissues Act (THOTA), amended in 2011, regulates organ donation in India, ensuring ethical practices and preventing trafficking. Altruistic donations from distant relatives or friends are permitted but strictly monitored to prevent financial exchanges.
- Brain stem death has been legally recognized as death under THOTA since 1994, with 2014 rules promoting organ donation from deceased donors.
- Recent updates to the National Organ Transplantation Guidelines removed the upper age limit, eliminated domicile requirements, and abolished registration fees, enhancing inclusivity and accessibility.

CHALLENGES IN ORGAN TRANSPLANTATION

- **Donor Organ Supply:** The demand for organ donations far exceeds the available supply. Approximately 1.8 lakh people in India suffer from renal failure each year, but only around 6,000 renal transplants are performed. The organ donation rate is still less than 1 per million population, while the need is for 65 organs per million.
- **Peri-Transplant Donor Tissue Damage:** Aging and diseases reduce donor organ quality, leading to issues such as Ischemia-Reperfusion Injury (IRI), which negatively impacts transplant success rates.
- **Outdated Preservation Techniques:** Many hospitals rely on traditional static cold storage methods, which are less effective than newer technologies like hypothermic or normothermic machine perfusion.
- **Chronic Rejection:** Long-term survival rates for transplanted organs have not improved

significantly in the past two decades, with current anti-rejection therapies offering only modest improvements.

- **Lack of Awareness:** There is a significant lack of awareness about organ donation and brain stem death among both the general public and healthcare professionals.

RECOMMENDATIONS FOR STRENGTHENING ORGAN DONATION IN INDIA

- **Enhancing Public Awareness:** Expanding public awareness campaigns and integrating organ donation education in schools can foster a donation culture from a young age.
- **Improving Infrastructure and Facilities:** Adopting advanced organ preservation techniques and standardized protocols can enhance organ quality and transplant success rates across centers.
- **Advancing Research and Innovation:** Investing in emerging technologies like bioengineered organs and nanotechnology can revolutionize organ transplantation and should be prioritized.
- **Strengthening Ethical and Regulatory Frameworks:** Strengthening ethical guidelines is essential for ensuring consent, equitable access, and transparency in organ donation and transplantation.

GLOBAL PERSPECTIVES AND BEST PRACTICES

India's organ transplantation system can benefit from adopting best practices from other countries. The World Health Organization (WHO) has outlined guiding principles that emphasize the importance of voluntary donations without monetary compensation, the separation of roles in the determination of death and organ removal, and the need for ethical oversight to prevent organ trafficking and exploitation.

CONCLUSION

The 2023-24 NOTTO report shows India's progress in organ donation while also pointing out ongoing challenges. By increasing awareness, improving infrastructure, and encouraging innovation, India can boost organ donation rates and save more lives. The goal should now be to build a strong and ethical organ donation system that other countries can look up to.

CORPORATE GOVERNANCE IN AI COMPANIES

Recent events have spotlighted the corporate governance issues in artificial intelligence (AI) companies, such as OpenAI. As AI technologies rapidly advance and integrate deeper into societal functions, the importance of adopting robust and ethically sound governance structures is increasingly recognized.

BACKGROUND

- **Traditional corporate governance** has long been dominated by the **principle of shareholder primacy**, which prioritizes maximizing shareholder value above other concerns.
- However, in recent years, there has been a **shift towards a stakeholder approach in corporate governance**, which considers the interests of all parties affected by a company's operations, including employees, customers, communities, and the environment.
- This shift has been particularly relevant for corporations involved in developing technologies, such as AI.

CURRENT GOVERNANCE ISSUES

Lack of ethical oversight:

- Many corporate structures prioritize profit over ethical considerations in AI development, leading to potential societal harm.
- For example, facial recognition technologies have been deployed without adequate safeguards for privacy and bias mitigation.

Insufficient stakeholder representation:

- Current governance models often exclude diverse voices, resulting in narrow decision-making that fails to account for broader societal impacts.
- This is evident in the limited involvement of ethicists and affected communities in AI product development processes.

CONCERNS / CHALLENGES

Monetary Interests Over Social Objectives:

- In practice, monetary interests often overshadow social objectives, even in companies with alternative governance models.

Shareholder and Investor Pressure:

- Shareholder and investor pressure can undermine the objectives of public benefit corporations, leading to a focus on short-term profits rather than long-term social benefits.

- Additionally, employee stock options, which align workforce interests with profit-driven goals, can further complicate efforts to prioritize ethical considerations.

Risk of 'Amoral Drift':

- Alternative governance structures may not be sufficient to prevent 'amoral drift,' where companies gradually shift away from their ethical commitments in pursuit of financial gain.
- This drift is particularly concerning in the rapidly evolving AI industry.

INTERNATIONAL PRACTICES IN CORPORATE GOVERNANCE FOR AI

EU AI Act:

- The European Union has been at the forefront of developing comprehensive regulations for AI through the proposed AI Act.
- The Act categorizes AI systems based on risk and imposes stricter regulations on high-risk AI applications.
- It also mandates transparency, accountability, and human oversight to ensure that AI systems are aligned with fundamental rights and societal values.

OECD AI Principles:

- The Organisation for Economic Co-operation and Development (OECD) has established AI Principles that emphasize inclusive growth, sustainable development, and well-being.

AI Ethics Committees:

- Many companies and governments are incorporating AI ethics committees into their governance structures.
- For instance, Microsoft's AI and Ethics in Engineering and Research (AETHER) Committee reviews AI projects to ensure they adhere to ethical guidelines.

Data Ethics Boards:

- Companies like Google have established data ethics boards to oversee the ethical use of AI and data.
- These boards provide guidance on issues such as data privacy, algorithmic fairness, and the societal impact of AI technologies.

WAY FORWARD

Regulating AI Corporations:

- Innovative regulatory frameworks should be developed to oversee AI corporations, ensuring that they operate within ethical boundaries and contribute to societal well-being.

Framing Ethical Standards:

- Ethical standards for AI governance need to be clearly defined and supported by regulatory backing to ensure compliance and accountability.

Enhancing Long-Term Profit Gains:

- Companies should be encouraged to adopt public benefit purposes, which can enhance long-term profit gains by fostering trust and credibility with stakeholders.

Reducing Compliance Costs:

- To encourage the adoption of social responsibility objectives, it is essential to reduce compliance costs for corporations, making it easier for them to align their operations with ethical standards.

Multistakeholder Models:

- The United Nations has advocated for multistakeholder approaches in AI

governance, involving governments, private sector, academia, and civil society.

Establish AI ethics boards:

- Integrate independent ethics committees into corporate structures, similar to the Ethics Committee of Lok Sabha, to review AI projects and ensure alignment with ethical guidelines and social responsibility.

Implement stakeholder-inclusive governance:

- Redesign board compositions to include representatives from various stakeholder groups, including ethicists, social scientists, and community leaders, ensuring diverse perspectives in decision-making processes.

CONCLUSION

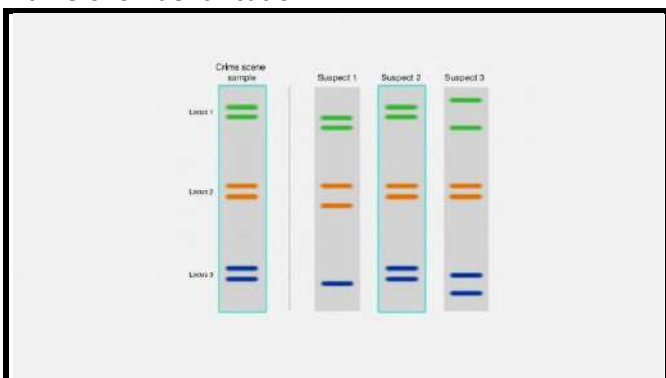
- By adopting **innovative governance models, incorporating ethical oversight, and ensuring stakeholder engagement**, AI companies can contribute to the development of technologies that are not only profitable but also socially responsible.
- As AI continues to play a critical role in shaping the future, the importance of robust, ethically sound corporate governance cannot be overstated.

DNA PROFILING IN THE JUSTICE SYSTEM

Andhra Pradesh recently celebrated the 10th anniversary of its bifurcation, which led to the creation of two states: Andhra Pradesh and Telangana. This milestone offers a chance to reflect on the political, economic, and historical ramifications of this division for the Telugu-speaking population.

DNA PROFILING

DNA profiling, also known as DNA fingerprinting, is a forensic technique used to identify individuals by analyzing specific regions of their DNA. While 99.9% of human DNA is identical across individuals, the remaining 0.1% contains unique sequences known as Short Tandem Repeats (STRs). These STRs are crucial in forensic investigations because they vary significantly among individuals, making them reliable markers for identification.



DNA AS THE BLUEPRINT OF LIFE

DNA, or deoxyribonucleic acid, is the hereditary material found in the cells of all living organisms. In eukaryotic cells (such as animal and plant cells), DNA is located in the nucleus, while in prokaryotic cells (like bacteria), it is found in the cytoplasm. Structurally, DNA is composed of two strands forming a double helix, organized into 23 pairs of chromosomes. These chromosomes are inherited equally from both parents and encode genetic information using sequences of four nucleotides: Adenine (A), Guanine (G), Thymine (T), and Cytosine (C).

SOURCES OF DNA

DNA can be extracted from various biological materials, including blood, saliva, semen, hair, and other body fluids. Even trace amounts of DNA left behind during physical contact, known as touch DNA, can be used for profiling, although it may be challenging to work with due to potential contamination and low quantity.

The Process of DNA Profiling

- Isolation:** DNA is extracted from the biological samples collected at a crime scene or from individuals.
- Purification & Quantitation:** The extracted DNA is purified to remove contaminants, and its concentration is determined.
- Amplification:** Selected genetic markers are replicated using Polymerase Chain Reaction (PCR) to produce sufficient DNA for analysis.
- Visualization & Genotyping:** The specific sequences of the DNA markers are identified, creating a DNA profile.
- Statistical Analysis & Interpretation:** The DNA profiles are compared, and the probability of a match is calculated.

SPECIAL CONSIDERATIONS

In cases where DNA samples are degraded, miniSTRs—smaller fragments of DNA—may be used because they are more likely to survive environmental stress. Additionally, mitochondrial DNA (mtDNA) can be analyzed to trace maternal lineage, especially when nuclear DNA is insufficient or unavailable.

APPLICATIONS OF DNA FINGERPRINTING

DNA Fingerprinting's unique ability to conclusively pinpoint individuals continues to transform countless facets of modern life. Its absoluteness has numerous applications, as highlighted below:

- Forensics:** Comparing crime scene DNA evidence to offender/suspect profiles helps identify perpetrators.

- It is especially useful in sexual assault and homicide cases with unknown suspects. For example Shraddha Walkar murder case investigation.
- **Paternity testing:** Comparing a child's DNA profile with alleged fathers can conclusively establish biological relationships for legal purposes.
- **Identify the unidentified:** Helps identify victims in accidents, wars, and natural disasters by matching DNA from unidentified remains to family members.
- **Wildlife forensics:** Used to catch poachers by analysing DNA from skins, bones, or blood samples and matching it to a particular species, geographic region, or even individual animal.
- **Anthropology:** Reconstruct genetic relationships and migrations of human populations over generations by studying ancient DNA samples.
- **Agriculture:** Determines pedigree and disease susceptibility in livestock breeding using genetic markers.
- **Disease identification:** Useful in the diagnosis of inherited disorders which include Huntington's disease, sickle cell anaemia, thalassemia, cystic fibrosis, etc.

LEGAL APPLICATIONS OF DNA

PROFILING

DNA profiling plays a critical role in legal proceedings, particularly in forensic investigations. The process involves comparing DNA profiles from evidence with known or reference samples, leading to three possible outcomes:

- **Match:** The profiles are identical, indicating a common source.
- **Exclusion:** The profiles differ, indicating different sources.
- **Inconclusive:** The data is insufficient to draw a clear conclusion.

Even when profiles match, this does not conclusively prove identity. Experts provide a "random occurrence ratio," which estimates how often a similar profile might appear in the general population. Courts consider this ratio along with other evidence to reach a verdict.

LEGAL PROVISIONS FOR DNA PROFILING IN INDIA

India has established a legal framework to regulate DNA profiling, balancing the need for forensic evidence with individual rights:

- **Article 20(3) of the Indian Constitution:** Protects individuals from self-incrimination, ensuring they cannot be forced to provide evidence against themselves.
- **Article 21:** Safeguards the right to life and personal liberty, preventing unauthorized interference with an individual's privacy.
- **Code of Criminal Procedure (CrPC), 1973:** Sections 53 and 53A authorize DNA profiling of suspects, particularly in cases of sexual assault.
- **Indian Evidence Act, 1872:** Sections 45-51 govern the admissibility of expert testimony, including DNA evidence, in court.

JUDICIAL PRECEDENTS

- **Pattu Rajan v. State of Tamil Nadu (2019):** The Supreme Court emphasized that DNA evidence, though reliable, is not infallible. The absence of DNA evidence should not lead to adverse inferences if other credible evidence is present.
- **Sharda v. Dharmpal (2003):** The Supreme Court upheld the authority of marital courts to mandate medical examinations, including DNA profiling, without violating constitutional rights.
- **Das @ Anu v. State of Kerala (2022):** The Kerala High Court ruled that drawing DNA samples in criminal cases does not violate the right against self-incrimination under Article 20(3).

Challenges and Limitations of DNA Profiling

- **Environmental Stress and Sample Degradation:** DNA samples can degrade due to environmental factors, leading to incomplete or unreliable results. Techniques like miniSTRs and mtDNA analysis are used to mitigate these issues, but they are not foolproof.
- **Complexity and Reliability:** DNA profiling requires precision and strict adherence to protocols. Contamination, improper handling, or delays can compromise the accuracy of the results.

- **Cost:** The high cost of DNA analysis can limit its accessibility, particularly in resource-constrained settings.
- **Legal Interpretation:** While DNA evidence is a powerful tool, it must be considered alongside other evidence to ensure a fair and just verdict. The absence of comprehensive regulations governing DNA profiling also raises concerns about its use and potential misuse.

WAY FORWARD

To address these challenges, several steps can be taken:

- **Improving Accuracy and Reliability:** Invest in research to enhance DNA profiling techniques, standardize procedures, and ensure quality control in forensic laboratories.
- **Ensuring Fair Legal Practices:** Develop guidelines for the admissibility and

interpretation of DNA evidence in court, emphasizing the need for corroborating evidence.

- **Regulatory Framework:** The DNA Technology (Use and Application) Regulation Bill, 2019, aims to establish a regulatory framework to prevent misuse and ensure the ethical use of DNA profiling. Revisiting and revising this bill to address privacy concerns and strengthen safeguards is essential.
- **Transparency in Legal Processes:** Ensuring transparency in how DNA evidence is collected, analyzed, and presented in court will help maintain public confidence in the justice system.

In conclusion, while DNA profiling is a revolutionary tool in forensic science, its application must be carefully regulated to ensure accuracy, reliability, and fairness in legal proceedings.

INDIA, VIETNAM RELATIONS

Recently during a bilateral meeting in New Delhi, **India and Vietnam** announced a new plan to strengthen their bilateral '**comprehensive strategic partnership**' over the next five years. The agreement highlights efforts to strengthen the relationship between the two countries, emphasizing areas such as customs capacity building, radio and television networks, agriculture, law and justice.

WHAT ARE THE KEY HIGHLIGHTS OF THE BILATERAL MEETING?

New Plan of Action:

- **India and Vietnam** have unveiled a new plan of action to enhance their bilateral '**comprehensive strategic partnership**' over the next five years.
- India-Vietnam relations were elevated to the level of '**Comprehensive Strategic Partnership**' in 2016. The plan of action for implementing the **comprehensive strategic partnership** will be rolled out from 2024 to 2028.
- As announced after the bilateral meeting, this includes initiatives to establish digital payment connectivity and expedite the review of the **ASEAN-India Trade in Goods Agreement**.

Agreements and Financial Support:

- During the visit, the two countries signed **six Memorandums of Understanding (MoUs)** covering agricultural research, customs capacity building, law and justice, media, and traditional medicines.
- India also **extended two lines of credit** to Vietnam totaling **USD 300 million**.

Trade and Digital Payments:

- India highlighted the significant growth in trade and cooperation in various sectors over the past decade, noting an **85% increase** in two-way trade and accelerated defense and security collaboration.
- An early conclusion of the **ASEAN-India Trade in Goods Agreement** review is expected to facilitate this growth.
- Additionally, Vietnam proposed a new bilateral trade target of **USD 20 billion**, up from **USD 14.8 billion**.
- Both nations have agreed to set up **digital payment** connectivity, enhancing cross-border transactions through **QR codes** and instant payments.

Focus on Defence and Security:

- The leaders also discussed boosting defense and security cooperation, including a new **Army Software Park** in Nayachang, funded by an Indian grant.
- Also, bilateral cooperation will extend to **counter terrorism** and **cybersecurity**.

Conservation of Temples:

- A **letter of intent** was signed between both Governments to restore and conserve a number of ancient **Shiva temples** located in My Son, Quang Nam province.

Indo-Pacific Vision:

- Both India and Vietnam reaffirmed their commitment to a free, open, and rules-based **Indo-Pacific region**, with Vietnam playing a key role in **India's Act East Policy**.
- India reiterated India's support for development over **expansionism**, indirectly addressing concerns about China's activities in the region.

WHAT IS THE PRESENT STATUS OF INDIA-VIETNAM RELATIONS?

Historical and Diplomatic Relations:

- **Father of Nation** of respective countries, **Mahatma Gandhi and President Ho Chi Minh** exchanged messages during their respective independence movements.
- Diplomatic relations between India-Vietnam were established in 1972, and bilateral relations were elevated to **strategic partnership** in 2007 which was further converted to a **Comprehensive Strategic Partnership** in 2016.
- The "**Joint Vision for Peace, Prosperity, and People**," adopted in 2020, now guides our relationship.
- In 2022, both nations marked the **50th anniversary** of their diplomatic ties and continue to work on strengthening their multifaceted cooperation.

Economic Cooperation:

- Indian companies like ONGC Videsh Limited., Bharat Electronics Limited, Hindustan Computers Limited, Bank of India and others have presence in **Vietnam**.
- **Trade Statistics** for April 2023 to March 2024, between India and Vietnam reached **USD 14.82 billion**.
- India's **exports** to Vietnam were USD 5.47 billion, while imports totaled USD 9.35 billion.
- The **ASEAN-India Trade in Goods Agreement**, finalized in 2009, provides a **preferential trade regime** and is currently under review.
- **India exports** engineering goods, agricultural products, chemicals, pharmaceuticals, electronics, minerals, textiles, and plastics to Vietnam.
 - Imports from Vietnam include computer and electronic goods, mobile phones, machinery, steel, chemicals, footwear, garments, and wooden products.
- **Indian investments** in Vietnam total around **USD 2 billion**, covering sectors such as energy, mineral processing, agro-processing, IT, auto components, pharmaceuticals, hospitality, and infrastructure.
- According to Foreign Investment Agency of Vietnam, during the period from Jan - Dec 2023, India had 53 fresh projects with a total value of **USD 131.90 million**.
- Conversely, Vietnam's investments in India are approximately **USD 28.55 million**, primarily in consumer goods, electronics, construction, IT, and pharmaceuticals.

Development Partnership:

- Developmental Partnership under the **Mekong-Ganga Cooperation (MGC) framework**, India has completed about 45 Quick Impact Projects across more than 35 Vietnamese provinces, and another 10 projects are underway.
- **MGC**, established in 2000, includes Cambodia, Laos, Myanmar, Thailand, Vietnam, and India, focusing on tourism, culture, education, IT, telecommunications, and transport.
- India has also supported the conservation of the **UNESCO World Heritage** site 'My Son' in Quang Nam Province, with the

Archaeological Survey of India finishing the restoration of several temples at the site in 2022.

Defense and Security Ties:

- India and Vietnam have robust **defense and security** ties, bolstered by a 2009 MoU on Defence Cooperation and a 2015 **Joint Vision on Defence Cooperation**.
- In 2022, they signed a "**Joint Vision Statement on India-Vietnam Defence Partnership towards 2030**" and a "**Memorandum of Understanding on Mutual Logistics Support**."
- Vietnam received an indigenously built missile corvette, **INS Kirpan**, in 2023.
- Bilateral military cooperation includes staff talks, exercises, training, and exchanges, such as the **VINBAX-2023 military exercise**. Also, a Vietnamese navy ship participated in the **MILAN international** maritime exercise in India in February 2024.

Cultural Exchange:

- MoUs between **Indian and Vietnamese** institutions promote **academic and cultural exchanges**.
- Events like the **Northeast India Festival in Ho Chi Minh City** enhance cultural ties. Ancient Buddhist connections are reflected in the travel of Vietnamese Buddhist scholars and pilgrims to India.
- **Yoga** is widely practiced in Vietnam, with many Indian yoga teachers contributing to its popularity.
- The **Swami Vivekananda Indian Cultural Centre** in Hanoi plays a significant role in promoting Indian culture and strengthening bilateral relations through various programs and activities.

WHAT ARE THE CHALLENGES IN INDIA-VIETNAM RELATIONS?

- **Trade Imbalances and Market Access:** Despite significant trade growth, India's imports from Vietnam exceed its exports, leading to an unfavorable trade balance for India.
 - Addressing these trade imbalances and improving market access for both nations' products remains a key challenge.
- **Geopolitical Tensions in the Indo-Pacific:** The strategic rivalry in the **Indo-Pacific**

region, particularly concerning China's assertiveness in the **South China Sea**, poses a challenge to India-Vietnam relations.

- Both countries share concerns about regional security and freedom of navigation, but navigating these geopolitical tensions requires careful diplomacy.
- **Infrastructural and Logistical Constraints:** The development of bilateral trade and investment is sometimes hampered by infrastructural and logistical challenges.
 - Limited connectivity, inadequate port facilities, and inefficient logistics can affect the smooth flow of goods and services between the two countries.
- **Security and Defense Cooperation Complexities:** While India and Vietnam have strengthened defense cooperation, there are complexities related to defense procurement, technology transfer, and strategic alignment.
 - Ensuring effective collaboration in defense and security requires addressing these complexities while navigating regional security dynamics.

WAY FORWARD

- **Comprehensive Strategic Partnership:** Both nations should continue to build on the existing Comprehensive Strategic Partnership by expanding collaboration across key areas, including defense, security, and regional stability.

- **Defense and Security:** Strengthen defense ties by increasing joint exercises, training programs, and technology exchanges.
 - Explore further cooperation in areas such as maritime security, cyber defense, and counter-terrorism.
- **Trade Growth:** Aim to achieve the proposed bilateral trade target of \$20 billion by addressing trade barriers, diversifying export-import products, and enhancing cooperation in sectors such as technology, energy, and pharmaceuticals.
- Accelerate the review of the **ASEAN-India Trade in Goods Agreement** to facilitate smoother trade operations.
 - **Investment Opportunities:** Promote bilateral investments by identifying and supporting high-impact projects in infrastructure, energy, and technology.
- **Mekong-Ganga Cooperation:** Continue supporting and expanding the **Mekong-Ganga Cooperation framework** by focusing on impactful projects that address regional development challenges.
- **Indo-Pacific Vision:** Collaborate on maintaining a free, open, and rules-based Indo-Pacific region. Work together to address regional challenges and support **ASEAN's** central role in regional security and economic integration.
- **Technology Transfer:** Promote technology transfer and joint ventures in emerging technologies such as **artificial intelligence, renewable energy, and digital infrastructure.**

PRELIMS IN-BRIEF BI-WEEKLY

HISTORY

National Culture Fund

- **Governance:** Managed by a Governing Council chaired by the Minister of Culture (25 members) and an Executive Committee headed by Secretary (Culture) (11 members).
- **Tax Benefit:** Donations eligible for 100% tax benefit under Section 80G (ii) of the Income Tax Act, 1961.
- **CSR Eligibility:** Covered under Schedule VII No. (v) of the Companies Act, 2013 for CSR contributions related to national heritage, art, and culture.
- **Audit:** Annual accounts audited by the Comptroller and Auditor General of India.

Vattezhuthu Script

- **Definition:** Syllabic alphabet used for Tamil and Malayalam.
- **Origins:** Developed from Tamil-Brahmi script; first appeared in stone inscriptions from the 4th century AD.
- **Usage:** In Tamil Nadu until the 9th century; in Kerala until the 15th century.
- **Evolution:** Evolved into Malayalam script and Koleluttu script.

Bharatanatyam

- **Origins:** Emerged in South Indian temples, performed by Devadasis; also known as Dasiattam.
- **Historical Evidence:**
- **Sangam Literature:** Mentioned in 'Silappadikaram'.
- **Temples:** Thillai Natarajar temple (108 poses), Kanchipuram (6th-9th centuries CE), Badami caves (7th century CE).
- **Predecessor:** Sadir dance form.

Bagata Tribe

- **Alternate Names:** Bagatha, Bagat, Bagodi, Bogad, Bhakta.
- **Location:** Odisha and Andhra Pradesh.
- **Festivals and Dances:** Participate in Dhimsa dance; known for energetic Sankidi Kelbar dances.

- **Family Structure:** Nuclear families; prefer cross-cousin marriages; marriage by negotiation is ideal.
- **Language:** Speak Adivasi Oriya, a form of Oriya, and Telugu.
- **Occupation:** Primarily farmers.
- **Religion:** Worship Hindu gods and family/tribal deities.

Thadou people

- **Location:** Primarily in the hill country near Imphal Valley, Manipur; also in Assam, Nagaland, Mizoram, and Myanmar.
- **Population:** Second largest ethnic group in Manipur as per the 2011 census.
- **Language:** Tibeto-Burman family of the Sino-Tibetan languages.
- **Economy:** Involves animal husbandry, cultivation, hunting, fishing, and jhum (slash-and-burn) agriculture.
- **Religion:** Predominantly Christian.

GEOGRAPHY

Millets

- **Family:** Cereal, part of the grass family.
- **Cultivation:** Predominantly in semiarid tropical regions of Africa and Asia; 97% of global production occurs here.
- **Types:** Jowar (Sorghum), Ragi, Bajra (Pearl millet).

Ganga River

- **Catchment Area:** Largest river basin in India, covering 26% of the country's land mass.
- **Population:** Home to about 43% of India's population (448.3 million as of 2001 census).
- **Transboundary Basin:** Covers 1,086,000 sq km, spanning India and Bangladesh.
- **States Covered:** Uttarakhand, Himachal Pradesh, Haryana, Uttar Pradesh, Madhya Pradesh, Rajasthan, Chhattisgarh, Jharkhand, Bihar, West Bengal, and Delhi.
- **Significance:** Provides water for irrigation, drinking, and industry; supports diverse flora and fauna.

- **Delta Region:** Ganges, Brahmaputra, and Meghna (GBM) delta, also known as Sundarbans delta.

Kali River (Kaali Nadi)

- **Location:** Flows through Uttara Kannada district, Karnataka, India.
- **Source:** Rises near Kushavali village, Uttara Kannada district; joins the Arabian Sea.
- **Significance:**
 - Supports local livelihoods, including fishermen in Karwar.
 - **Key dams:** Supa Dam at Ganeshgudi.
- **Infrastructure:** National Highway NH-17 crosses the Kali River via the Kali Bridge.

Krishna River

- **Second Longest Peninsular River** Flowing East
- **River Name:** Godavari
- **Origin:** Near Mahabaleshwar, Western Ghats
- **Basin States:** Andhra Pradesh, Maharashtra, Karnataka
- **Tributaries:**
 - **Left Bank:** Venna, Koyna, Panchganga, Dudhganga, Ghatprabha, Malprabha
 - **Right Bank:** Bhima, Musi, Munneru, Paleru, Don, Tungbhadra

Himalayas

The Great Himalayas:

- **Also Known As:** Himadri, Central Himalayas, Inner Himalayas
- **Features:**
 - **Height:** ~5000 km
 - **Composition:** Igneous and metamorphic rocks
 - **Core:** Archean rocks
 - **Notable Passes:** Zojila, Bara Lapcha La, Shipki La, Niti Pass, Lipu Lekh, Nathula, Jelep La
 - **Range:** From Nanga Parbat (west) to Namcha Barwa (east)

Trans Himalayas:

- **Length:** 1,600 km
- **Location:** Southern edge of Tibetan Plateau, north of Yarlung Tsangpo River
- **Composition:** Granite and volcanic materials
- **Notable Range:** Karakoram (includes K2, the second-highest peak globally)

Lesser Himalayas:

- **Height:** 1,300 to 5,000 km

- **Features:** Crystalline sediments, heavily folded
 - **Ranges:** Dhauladhar, Pirpanjal, Nag Tibba, Mussoorie, Mahabharat
 - **Notable Locations:** Shimla, Mussoorie, Ranikhet, Nainital, Darjeeling

Shivalik:

- **Also Known As:** Outer Himalayas
- **Features:**
 - **Composition:** Fossiliferous sedimentary rocks (sandstone, clay, conglomerate)
 - **Characteristics:** Steep southern slopes, duns, and duars
 - **Forest Cover:** Dense in the northeast, sparse in the west
 - **Notable Example:** Dehra Dun

SCIENCE & TECHNOLOGY

Parakh Report

- **Established:** Within NCERT in 2023.
- **Objective:** Standardize school board assessments nationwide per NEP 2020.
- **Key Areas:**
 - Competency-Based Assessment
 - Large-Scale Achievement Surveys
 - Equivalence of School Boards
 - Holistic Progress Cards for all educational stages

Nano-MIND Technology

- **Purpose:** Enables remote, precise modulation of deep brain neural circuits using magnetism.
- **Function:** Utilizes magnetic fields and magnetized nano particles to target specific brain circuits.
- **Advancement:** Offers a novel approach for studying and influencing brain functions like cognition, emotion, and motivation.

Pumped storage projects

- **Type:** Hydroelectric energy storage.
- **Mechanism:** Uses two reservoirs at different elevations; pumps water to the upper reservoir

when there is excess energy and releases it to generate electricity during high demand.

- **Types:**
 - **Open-loop:** Connected to natural water sources.
 - **Closed-loop:** 'Off-river' with no significant natural inflow.
 - **Advantages:** Recycles water, absorbs surplus energy, and provides power during peak demand.

Axiom-4 mission

- **Operator:** Axiom Space, using a SpaceX Crew Dragon spacecraft.
- **Launch Date:** Scheduled for 2024.
- **Objectives:**
 - **Commercial Space Endeavours:** Facilitate scientific research, technological development, and space tourism.
 - **International Collaboration:** Diverse international crew to strengthen global partnerships.
 - **Research and Development:** Conduct experiments in microgravity across various fields.
- **Key Features:**
 - **Spacecraft:** SpaceX Dragon atop a Falcon 9 rocket.
 - **Duration:** Approximately 14 days.
 - **Activities:** Scientific experiments, technology demonstrations, and educational outreach.
 - **Long-Term Vision:** Part of Axiom Space's plan to build a commercial space station.

Polio

- **Disease:** Crippling and potentially deadly viral infection affecting the nervous system.
- **Types:**
 - Wild Poliovirus type 1 (WPV1)
 - Wild Poliovirus type 2 (WPV2)
 - Wild Poliovirus type 3 (WPV3)
- **Transmission:** Mainly through the faecal-oral route or contaminated food/water; affects children under 5.
- **Symptoms:** Minor symptoms include fever, tiredness, nausea, headache, and limb pain; severe cases lead to irreversible paralysis or death.

- **Prevention:**
 - **Oral Polio Vaccine (OPV):** Administered as birth dose, followed by primary doses at 6, 10, and 14 weeks, and a booster at 16-24 months.
 - **Injectable Polio Vaccine (IPV):** Given along with the 3rd DPT dose under the Universal Immunisation Programme (UIP).
 - **Note:** No cure; prevention through vaccination is crucial.

Alzheimer

- **Condition:** Progressive brain disorder causing decline in memory, thinking, learning, and organizing skills.
- **Prevalence:** Most common type of dementia, accounting for 60-80% of all cases.
- **Affects:** Primarily people aged 65 and over; 10% of cases occur in those younger.
- **Brain Impact:** Involves brain regions controlling thought, memory, and language.
- **Symptoms:** Early signs include forgetting recent events; progresses to severe memory loss and impaired daily functioning.
- **Cause:** Not fully understood; believed to involve genetic, environmental, and lifestyle factors.
- **Treatment:** No cure; symptom management through medications and therapies.

Tuberculosis

- **Cause:** Bacteria Mycobacterium tuberculosis, primarily affecting the lungs.
- **Latent TB:** Inactive bacteria, no symptoms, not contagious, but can become active.
- **Active TB:** Symptoms present, contagious.
- **Prevalence:** About 25% of the world's population has latent TB.
- **Risk:** 5-15% lifetime risk of developing active TB; higher in those with compromised immune systems (e.g., HIV, malnutrition, diabetes).
- **Transmission:** Spread through the air from coughs, sneezes, or spitting of infected individuals.

Lithium

- **Type:** Soft, silvery-white metal, alkali metal (Group 1 of the periodic table).

- **Features:** Lowest density of all metals, lightest solid element, reacts vigorously with water, body-centered cubic crystal structure.
- **Occurrence:** Found combined in igneous rocks, brine deposits, and mineral springs; seawater concentration: 0.1 ppm.
- **Major Reserves:** Concentrated in the Lithium Triangle (Argentina, Bolivia, and Chile).

Diabetes

- **Definition:** Chronic disease where the pancreas fails to produce insulin or the body cannot effectively use insulin.
- **Insulin Role:** Regulates blood glucose levels.
- **Complication:** Leads to hyperglycaemia (high blood glucose levels).
- **Long-term Effects:** Associated with damage to organs and tissues, leading to blindness, kidney failure, heart attacks, stroke, and lower limb amputation.

Chandrayaan 3

- **Objective:** Demonstrate end-to-end capability in safe landing and roving on the Moon, particularly targeting the lunar south pole.
- **Components:**
 - **Propulsion Module:** Carries the lander and rover to a 100 km lunar orbit.
 - **Lander:** Equipped with Chandra's Surface Thermophysical Experiment, Instrument for Lunar Seismic Activity, and a Langmuir Probe.
 - **Rover:** Equipped with Alpha Particle X-ray Spectrometer and Laser-Induced Breakdown Spectroscopy for analyzing elemental composition.
- **Launch:** Scheduled to be launched by LVM3 from Satish Dhawan Space Centre, Sriharikota.
- **Mission Life:** Approximately one lunar day (~14 Earth days).
- **Scientific Goals:**
 - Study lunar regolith's thermo-physical properties.
 - Analyze lunar seismicity.
 - Investigate the lunar surface plasma environment.

Viral encephalitis

- **Nature of Disease:**

- Viral infection causing brain inflammation.
- Caused by a flavivirus related to dengue, yellow fever, and West Nile viruses.
- Major cause of Acute Encephalitis Syndrome (AES) in India.
- **Transmission:**
 - Spread through bites from infected Culex mosquitoes.
 - Mosquitoes breed in rice fields and large water bodies with aquatic vegetation.

POLITY

Governor

- **Article 155 & 156:** Governors are appointed by the President and hold office "during the pleasure of the President," meaning they can be removed by the central government before completing a five-year term.
- **Article 163:** Governors are generally aided and advised by the state Council of Ministers, except in functions requiring discretion.
- **Impeachment:** There is no provision for the impeachment of a Governor.

Preamble

- **Purpose:** Sets out the guiding principles and philosophy of the Constitution.
- **Origin:** Based on the Objectives Resolution drafted by Jawaharlal Nehru and adopted on January 22, 1947.
- **Components:**
 - **Source of Authority:** The Constitution derives its authority from the people of India.
 - **Nature of the State:** India is a Sovereign, Socialist, Secular, and Democratic Republic.
 - **Objectives:** To secure justice, liberty, equality, and promote fraternity to maintain national unity.
 - **Adoption Date:** November 26, 1949.
 - **Amendments:** The 42nd Amendment (1976) added "Socialist" and "Secular."
- **Supreme Court Interpretation:**

- **Berubari Union Case:** The Preamble is part of the Constitution and can guide interpretation.
- **Keshvananda Bharati Case:** The Preamble is part of the Constitution and can be amended under Article 368.
- **LIC of India Case:** Confirmed that the Preamble is part of the Constitution.

- Seizure/freezing and attachment of property obtained from crime.
- Punishments: Rigorous imprisonment (3-7 years) and unlimited fines.
- **Obligations:**
 - Banking companies, financial institutions, and intermediaries must verify client identities, maintain records, and provide information to FIU-IND.

Minorities

- **Article 29:**
 - Protects the cultural and educational interests of any citizen or group with a distinct language, script, or culture.
 - Prohibits discrimination based on religion, race, caste, language, or any of these factors.
- **Article 30:**
 - Ensures the right of minorities to establish and administer educational institutions of their choice.
- **Minority Classification:**
 - **Religious Minorities:** Identified based on numerical strength of the community.
 - **Linguistic Minorities:** Defined as groups whose mother language differs from the majority's language.

CBI

- **Establishment:**
 - Set up in 1963 by the Ministry of Home Affairs.
 - Recommended by the Santhanam Committee (1962–1964).
 - Transferred to the Ministry of Personnel; now an attached office.
- **Legal Basis:**
 - Not a statutory body; derives powers from the Delhi Special Police Establishment Act, 1946.
- **Role and Functions:**
 - Premier investigating agency in India.
 - Focuses on prevention of corruption, economic offences, and conventional crimes.
 - Assists the Central Vigilance Commission and Lokpal.
 - Functions under the Dept. of Personnel, Ministry of Personnel, Pension & Public Grievances, under the Prime Minister's Office.
- **Jurisdiction:**
 - Primarily investigates corruption by Central Government employees, Union Territories, and public sector undertakings.
 - Supervision for Prevention of Corruption Act cases is with the Central Vigilance Commission.
- **International Role:**
 - Acts as the National Central Bureau of Interpol in India.
 - Coordinates Interpol-related activities and requests from Indian law enforcement agencies.

Prevention of Money Laundering

- **Purpose:**
 - Prevent money laundering.
 - Combat illegal activities and economic crimes.
 - Confiscate property involved in or derived from money laundering.
 - Penalize offenders.
 - Appoint adjudicating authorities and appellate tribunals.
- **Key Agencies:**
 - **Enforcement Directorate (ED):** Investigates money laundering offences.
 - **Financial Intelligence Unit–India (FIU-IND):** Receives, processes, analyzes, and disseminates information on suspect financial transactions.
- **Scheduled Offences:** Investigated by relevant agencies (e.g., local police, CBI, customs, SEBI).
- **Actions Against Offenders:**

Enforcement Directorate

- **Function:** Specialised financial law enforcement and economic intelligence agency.
- **Administrative Control:** Functions under the Department of Revenue, Ministry of Finance, Government of India.
- **Primary Mandate:**
 - Enforces economic laws.
 - Combats economic crimes, especially money laundering and violations of foreign exchange laws.

SOCIAL JUSTICE

MGNREGA

- **Enacted:** August 25, 2005.
- **Purpose:** Guarantees 100 days of employment per year to adult members of rural households for unskilled manual work at minimum wage.
- **Implementation:** Monitored by the Ministry of Rural Development (MRD) in coordination with state governments.
- **Objective:** Enhance rural purchasing power and provide work to those below the poverty line in rural India.

Protection of Children from Sexual Offences (POCSO) Act

- A special court for hearing cases filed under the Protection of Children from Sexual Offences (POCSO) Act, 2012 Thursday issued a non-bailable arrest warrant against a former political leader.
- The Protection of Children from Sexual Offences (POCSO) Act was enacted in 2012 to provide legal protection to children from sexual abuse, exploitation and pornography.
- It defines various forms of sexual offences against children and prescribes stringent punishments for the perpetrators.
- "Children" according to the Act are individuals aged below 18 years. The Act is gender-neutral.
- Sexual assault is deemed to be "aggravated" under certain circumstances such as when the child is mentally ill. Also when the abuse is committed by the person in a position of trust such as a doctor, teacher, policeman, family member.

Border Security Force

- **Establishment:** Formed in 1965 after the India-Pakistan war.
- **Role:** Defends India's borders, primarily along the Pakistan and Bangladesh borders, including the Indo-Pakistan International Border, Indo-Bangladesh International Border, and Line of Control (LoC).
- **Control:** Operates under the **Ministry of Home Affairs**.

INTERNATIONAL RELATIONS

Gaza Strip

- **Formation:** Emerged in 1948, during the creation of Israel and displacement of Palestine's Arab population.
- **Displacement:** Most refugees were dispersed to neighboring countries like Jordan, Syria, and Lebanon; many settled in the Gaza Strip.
- **Current Demographics:** Approximately 70% of Gaza's population are refugees.

BIMSTEC

- **Formation:** Established on June 6, 1997, through the Bangkok Declaration.
- **Members:** Seven states:
 - **South Asia:** Bangladesh, Bhutan, India, Nepal, Sri Lanka
 - **Southeast Asia:** Myanmar, Thailand
- **Secretariat:** Permanent Secretariat in Dhaka since September 2014.
- **India's Lead Areas:** Counter-Terrorism, Transport & Communication, Tourism, Environment and Disaster Management.

India-Bangladesh

- **Trade:**
 - Bangladesh is India's largest trade partner in South Asia.
 - India is the second largest trade partner of Bangladesh.
 - Bangladesh's exports to India tripled, crossing \$1 billion in 2018-19.
- **Connectivity:**

- **Restored Links:** Chilahati (Bangladesh) to Haldibari (India) railway link (inaugurated in 2021).
- **Passenger Trains:** Maitree Express and Bandhan Express frequency increased.
- **Agartala-Akhaura Rail Link:** First train connection from northeastern India to Bangladesh.
- **Protocol on Inland Water Transit and Trade (PIWTT):** For goods transportation and navigability.
- **Development Partnership:**
 - **Lines of Credit:** \$8 billion extended since 2010 for infrastructure development.
 - **Key Sectors:** Roads, railways, shipping, ports.
- **Capacity Building:**
 - **Training:** 1,800 Bangladesh Civil Service officials trained at NCGG, Mussoorie since 2019.
- **Cultural Cooperation:**
 - **Indira Gandhi Cultural Centre (IGCC), Dhaka:** Offers programs in Yoga, Kathak, Manipuri dance, Hindi, and Hindustani classical music.
- **Defence Cooperation:**
 - **Exercises & Dialogues:** Includes CORPAT 'Bangosagar', Regional Commanders meeting, and Annual Defense Dialogues.
- **Countering China's Influence:**
 - **Assistance:** Nuclear technology, AI, modern farming, and flood data exchange.
- **Water Sharing:**
 - **Kushiyara Pact:** Agreement to share waters of the Kushiyara River.
- **Levy:** Applied on the supply of goods and services from manufacturer to consumer; levied at each point of sale.
- **Tax Structure:**
 - **Intrastate Sales:** Central GST (CGST) and State GST (SGST).
 - **Interstate Sales:** Integrated GST (IGST).
- **Credit Mechanism:** Input tax credits available at each stage, taxing only value addition.
- **Factors Considered:** Cost of production, demand and supply, market price trends, inter-crop price parity.
- **CACP:** Established in January 1965, attached to the Ministry of Agriculture and Farmers Welfare.
- **Final Approval:** Cabinet Committee on Economic Affairs (CCEA), chaired by the Prime Minister.
- **Objective:** Ensure remunerative prices and encourage crop diversification.
- **Crops Covered:**
- **Mandated Crops:** 22 crops including 14 kharif, 6 rabi, and 2 commercial crops.
- **Sugarcane:** Fair and remunerative price (FRP) recommended.

Consumer Price Index

- **Definition:** Measures variations in the price level of a basket of consumer goods and services bought by households.
- **Calculation:** Based on periodic price data of a sample of items.
- **Purpose:** Estimates changes in prices at the consumer level.
- **Comparison:** CPI tracks consumer goods and services; Wholesale Price Index (WPI) tracks only goods, not services.

Goods and Services tax

- **Introduction:** Replaced multiple indirect taxes (excise duty, VAT, service tax) in India.
- **Legislation:** Passed on 29th March 2017, effective from 1st July 2017.
- **Nature:** Single domestic indirect tax law, comprehensive, multi-stage, and destination-based.
- **Levy:** Applied on the supply of goods and services from manufacturer to consumer; levied at each point of sale.
- **Tax Structure:**
 - **Intrastate Sales:** Central GST (CGST) and State GST (SGST).

ECONOMY

Minimum Support Price

- **Purpose:** Guaranteed price paid to farmers by the government to ensure fair returns for their produce.
- **Legislation:** Passed on 29th March 2017, effective from 1st July 2017.
- **Nature:** Single domestic indirect tax law, comprehensive, multi-stage, and destination-based.

- **Interstate Sales:** Integrated GST (IGST).
- **Credit Mechanism:** Input tax credits available at each stage, taxing only value addition.
- **Payment:** Paid by consumers, remitted to the government by businesses.

SEBI

- **Establishment:** Formed as a non-statutory body in 1988; acquired statutory powers on 30th January 1992 via the SEBI Act 1992.
- **Autonomy:** Became an autonomous body on 12 April 1992; regulator of capital markets under the Government of India.
- **Headquarters:** Mumbai, Maharashtra; regional offices in New Delhi, Kolkata, Chennai, and Ahmedabad.
- **Local Offices:** Opened in Jaipur, Bangalore, Guwahati, Bhubaneswar, Patna, Kochi, and Chandigarh during FY 2013-2014.
- **Organization:**
 - **Chairman:** Nominated by the Union Government.
 - **Members:**
 - Two officers from the Union Finance Ministry.
 - One member from the Reserve Bank of India (RBI).
 - Five members nominated by the Union Government, including three full-time members.

Capital gain tax

- **Definition:** Profits from the sale of capital assets such as land, buildings, vehicles, patents, and machinery. It also includes rights related to an Indian company.
- **Types of Capital Gains:**
 - **Short-term Capital Gains (STCG):** Gains from assets held for less than 36 months (24 months for immovable properties). Taxed at applicable short-term rates.
 - **Long-term Capital Gains (LTCG):** Gains from assets held for over 36 months (1 year for equities and mutual funds). Taxed at long-term rates.

- **Taxation:** Both individuals and businesses are subject to Capital Gains Tax (CGT). Strategies exist to manage and reduce CGT liability.

ECOLOGY & ENVIRONMENT

Eco-Sensitive Zones (ESZ)

- **Definition:** Areas within 10 km of national parks and wildlife sanctuaries, notified to protect biodiversity.
- **Implementation:** Generally follows the 10-km rule, but can extend beyond this if ecologically significant corridors are present.

Elephant

- **Keystone Species:** Plays a crucial role in forest ecosystem balance and health.
- **Intelligence:** Largest brain size of any land animal.
- **Ecosystem Significance:**
 - Important grazers and browsers.
 - Spread seeds and shape vegetation.
 - Create clearings in forests for sunlight and plant growth.
 - Dig for water, aiding other wildlife.
- **Elephants in India:**
 - Largest number of wild Asian Elephants (29,964 as per 2017 Project Elephant census).
 - Constitutes about 60% of the global population.
 - Highest numbers in Karnataka, followed by Assam and Kerala.
- **Conservation Status (IUCN Red List):**
 - **African Forest Elephant (*Loxodonta cyclotis*):** Critically Endangered.
 - **African Savanna Elephant (*Loxodonta africana*):** Endangered.
 - **Asian Elephant (*Elephas maximus*):** Endangered.

SELF EVALUATION BI-WEEKLY

PRELIMS

1. Bharatanatyam, a classical Indian dance form, originated from:

- A. Kerala
- B. Tamil Nadu
- C. Andhra Pradesh
- D. Karnataka

2. Consider the following statements about Millets:

Statement 1: Millets are generally drought-resistant and require less water compared to rice and wheat.

Statement 2: Millets are rich in nutrients like iron, calcium, and fibre, making them a healthier dietary option.

Which of the following options given is/are correct?

- A. Only Statement 1 is correct.
- B. Only Statement 2 is correct.
- C. Both Statements 1 and 2 are correct.
- D. Neither Statement 1 nor Statement 2 is correct.

3. Consider the following statements about Thadau people:

Statement 1: The Thadau people are indigenous to the north-eastern Indian state of Manipur.

Statement 2: The Thadau language belongs to the Tibeto-Burman language family.

Which of the following options given is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

4. Which of the following crops are typically covered under the Minimum Support Price (MSP) scheme in India?

- A. Wheat, rice, and sugarcane
- B. Coffee, tea, and spices
- C. Cotton, jute, and rubber
- D. Maize, sorghum, and barley

5. Which of the following is the correct sequence of the given Ganga tributaries from west to east?

- A. Yamuna, Ghaghra, Gandak, Kosi
- B. Gomti, Ghaghra, Gandak, Kosi
- C. Yamuna, Gandak, Ghaghra, Kosi
- D. Gomti, Gandak, Ghaghra, Kosi

6. Which article of the Indian Constitution guarantees the right of minorities to establish and administer educational institutions of their choice?

- A. Article 25
- B. Article 29
- C. Article 30
- D. Article 31

7. Consider the following statements:

Statement 1: The Krishna and Kali rivers originate in the Western Ghats.

Statement 2: Both rivers flow eastward and eventually drain into the Bay of Bengal.

Statement 3: The Krishna River is longer than the Kali River.

Which of the following options given is/are correct?

- A. Only Statement 1 is correct.
- B. Only Statements 1 and 2 are correct.
- C. Only Statements 2 and 3 are correct.
- D. All Statements 1, 2, and 3 are correct.

8. Which of the following statements about Alzheimer's disease are correct?

- 1. Alzheimer's disease is characterized by the accumulation of amyloid plaques and tau tangles in the brain.
- 2. Alzheimer's disease is a type of stroke that primarily affects blood vessels in the brain.

Which of the following options given is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2
- D. Neither 1 nor 2

9. Which of the following statements about elephants are correct?

- 1. Elephants are native to three continents: Africa, Asia, and Europe.
- 2. The Asian elephant is generally smaller and has smaller ears compared to the African elephant.
- 3. The African elephant has two subspecies: the African Forest elephant and the African Savannah elephant.

Which of the following options given is/are correct?

- A. 1 and 2
- B. 2 and 3
- C. 1 and 3
- D. 1, 2, and 3

10. Which of the following statements about Eco-Sensitive Zones (ESZs) are correct?

1. ESZs are designated around protected areas to act as a buffer and reduce human impact on the core area.
2. ESZs can include areas such as national parks, wildlife sanctuaries, and biosphere reserves.

Select the correct option:

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

11. Which of the following statements about the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) are correct?

1. MGNREGA guarantees 100 days of wage employment per year to every rural household whose adult members volunteer for unskilled manual work.
2. The scheme provides for the creation of durable assets in rural areas and aims to enhance the livelihood security of rural households.

Select the correct option:

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

12. Which of the following groups of countries are members of BIMSTEC?

- A. India, Bangladesh, Sri Lanka, Thailand
- B. India, Pakistan, Nepal, Bhutan
- C. Bangladesh, Myanmar, Maldives, Afghanistan
- D. Nepal, Bhutan, Sri Lanka, Maldives

13. Which of the following ministries is responsible for overseeing the Central Bureau of Investigation (CBI)?

- A. Ministry of Home Affairs
- B. Ministry of Law and Justice
- C. Ministry of Personnel, Public Grievances and Pensions
- D. Ministry of Finance

14. Which of the following statements regarding the Securities and Exchange Board of India (SEBI) is/are correct?

1. SEBI was established by an Act of Parliament in 1992 to regulate the securities market in India.
2. SEBI operates under the Ministry of Finance and is primarily responsible for regulating the banking sector in India.

Select the correct option:

- A. Only Statement 1 is correct.
- B. Only Statement 2 is correct.
- C. Both Statement 1 and Statement 2 are correct.
- D. Neither Statement 1 nor Statement 2 is correct.

15. Which of the following statements regarding the Protection of Children from Sexual Offences (POCSO) Act is/are correct?

1. The POCSO Act was enacted in 2012 to provide a comprehensive legal framework for the protection of children from sexual abuse and exploitation.
2. The Act defines a child as anyone under the age of 18 and includes provisions for the protection of both boys and girls.
3. Under the POCSO Act, the minimum punishment for the offense of sexual assault is set at 5 years of imprisonment.

Select the correct option:

- A. Only Statement 1 and Statement 2 are correct.
- B. Only Statement 2 and Statement 3 are correct.
- C. Only Statement 1 and Statement 3 are correct.
- D. All of the above statements are correct.

16. Consider the following statements about the Enforcement Directorate (ED):

1. The Enforcement Directorate is a specialized agency under the Ministry of Home Affairs.
2. It is responsible for investigating and enforcing laws related to money laundering and foreign exchange violations.
3. The ED is headed by a Director who is appointed by the Union Government for a fixed term of five years.

Which of the above statements is/are correct?

- A. Only 1

- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

17. Consider the following statements about the Preamble of the Indian Constitution:

1. The Preamble was adopted on January 26, 1950, the day the Constitution came into effect.
2. The Preamble declares India to be a Sovereign, Socialist, Secular, Democratic Republic.
3. The words "Socialist" and "Secular" were added to the Preamble by the 42nd Amendment Act of 1976.

Which of the above statements is/are correct?

- A. 1 and 2
- B. 2 and 3
- C. 1 and 3
- D. 1,2 and 3

18. Consider the following statements about Chandrayaan-3:

1. Chandrayaan-3 is a lunar mission launched by the Indian Space Research Organisation (ISRO) to land on the Moon's south pole.
2. The mission Chandrayaan-3 included an orbiter, lander, and rover as part of its payload.
3. Chandrayaan-3 was launched with the Gaganyaan rocket, which is designed for crewed space missions.
4. The mission Chandrayaan-3 aims to demonstrate the capability to perform a soft landing on the Moon.

Which of the above statements is/are correct?

- A. Only Statement 1 and Statement 2 are true.
- B. Only Statement 1 and Statement 4 are true.
- C. Only Statement 2 and Statement 3 are true.
- D. Only Statement 3 and Statement 4 are true.

19. Consider the following statements:

1. Type 1 diabetes is an autoimmune condition where the immune system attacks insulin-producing beta cells in the pancreas, leading to a complete lack of insulin production.

2. Type 2 diabetes is characterized by insulin resistance and often involves a gradual decrease in insulin production, typically associated with lifestyle factors such as obesity and physical inactivity.

Which of the following statements is/are correct?

- A. Only Statement 1 is correct.
- B. Only Statement 2 is correct.
- C. Both Statement 1 and Statement 2 are correct.
- D. Neither Statement 1 nor Statement 2 is correct.

20. Which of the following countries are part of the Lithium Triangle?

- A. Brazil, Chile, Argentina
- B. Chile, Argentina, Bolivia
- C. Bolivia, Peru, Colombia
- D. Argentina, Bolivia, Peru

21. Which of the following correctly lists the Himalayan mountain ranges from east to west?

- A. Zaskar Range, Ladakh Range, Great Himalayas, Lesser Himalayas, Siwalik Hills
- B. Great Himalayas, Lesser Himalayas, Siwalik Hills, Zaskar Range, Ladakh Range
- C. Siwalik Hills, Lesser Himalayas, Great Himalayas, Ladakh Range, Zaskar Range
- D. Lesser Himalayas, Great Himalayas, Siwalik Hills, Ladakh Range, Zaskar Range

22. Which state is the Bagata tribe primarily associated with?

- A. Odisha
- B. Andhra Pradesh
- C. Telangana
- D. Karnataka

23. Which of the following statements about tuberculosis (TB) is/are correct?

1. TB is caused by the bacterium *Mycobacterium tuberculosis* and primarily affects the lungs.
2. TB is exclusively transmitted through direct contact with infected blood.

Which of the above statements is/are correct?

- A. Only statement 1 is correct.
- B. Only statement 2 is correct.
- C. Both statements 1 and 2 are correct.

D. Neither statement 1 nor 2 is correct.

C. Both statements 1 and 2 are correct.

D. Neither statement 1 nor 2 is correct.

24. Consider the following statements about the

PARAKH report:

1. The *PARAKH* report, released in 2024, evaluates the implementation of the National Education Policy (NEP) 2020 in primary and secondary schools across India.
2. According to the *PARAKH* report, the performance of students in foundational literacy and numeracy has shown significant improvement since the adoption of NEP 2020.

Which of the following statements is/are correct?

- A. Only statement 1 is correct.
- B. Only statement 2 is correct.

25. Which of the following is the correct sequence of the tributaries of the Krishna River from east to west?

- A. Tungabhadra → Ghataprabha → Malaprabha → Bhima
- B. Bhima → Ghataprabha → Malaprabha → Tungabhadra
- C. Malaprabha → Ghataprabha → Bhima → Tungabhadra
- D. Tungabhadra → Malaprabha → Ghataprabha → Bhima

MAINS

1. Critically analyze the progress in India's organ donation and transplantation system as highlighted by the 2023-24 NOTTO report. Discuss key achievements, ongoing challenges, and the effectiveness of existing regulatory and ethical frameworks. Suggest measures to improve the system and how India can adopt global best practices to enhance its network.

2. Discuss the primary causes and impacts of landslides in India, with a focus on the recent landslides in Wayanad, Kerala. Evaluate the effectiveness of current government initiatives for landslide risk management and suggest additional measures to enhance landslide mitigation strategies.

3. Examine the shift from shareholder primacy to stakeholder approaches in corporate governance.

How does this shift impact the ethical oversight of AI technologies?

4. Discuss the key achievements and challenges in the India-Vietnam bilateral relationship. How can both countries enhance their strategic partnership to address these challenges and leverage opportunities in trade, defense, and regional cooperation? Additionally, analyze the role of the ASEAN-India Trade in Goods Agreement and suggest measures to strengthen its impact on the bilateral trade growth target.

5. Discuss the significance and limitations of DNA profiling in forensic investigations. How can India enhance its regulatory framework to address these challenges and ensure the ethical use of DNA technology?

SOLVED ESSAY BI-WEEKLY

SOCIAL MEDIA IS INHERENTLY A SELFISH MEDIUM

SOCIAL MEDIA: NAVIGATING ITS DUAL NATURE

Social media has become an integral part of contemporary life, fundamentally altering communication, information dissemination, and personal representation. Platforms such as Facebook, Instagram, Twitter, and TikTok have revolutionized how individuals interact and present themselves, bringing both significant benefits and notable drawbacks. While social media facilitates connectivity and information sharing, it also cultivates a culture of self-promotion and individualism, often driven by selfish motives.

THE CULT OF SELF-PRESENTATION

Social media platforms empower users to meticulously curate their online personas, focusing on self-presentation and impression management. Individuals can highlight their achievements, physical appearance, and social status, often leading to a portrayal of an idealized self rather than an authentic one. For instance, platforms like Instagram are filled with highly edited images that emphasize beauty, wealth, and success, reinforcing a culture of self-promotion. This selective sharing often prioritizes personal gain over meaningful interactions and can lead to a skewed sense of reality.

THE FEEDBACK LOOP OF VALIDATION

The architecture of social media—featuring likes, comments, and shares—creates a feedback loop that fuels the pursuit of validation. Users become motivated by the desire for digital approval, often engaging in content that garners attention rather than fostering genuine connections. This validation-seeking behavior can become addictive, reinforcing a self-centered mindset where the primary goal shifts to receiving recognition rather than contributing to substantive discussions or relationships.

NARCISSISM AND SELF-ESTEEM ISSUES

Research indicates a correlation between social media use and increased levels of narcissism and self-esteem issues. Narcissistic individuals are drawn to social media as it offers a platform for self-admiration and public recognition. Conversely, those with lower self-esteem may seek validation online, creating a cycle of comparison and envy. This dynamic accentuates individualism and self-focus, reflecting how social media can cater to and amplify selfish tendencies.

CULTURAL REFLECTIONS OF INDIVIDUALISM

In Western societies influenced by neoliberal ideologies, individualism and personal success are highly valued. Social media amplifies these values by providing platforms where personal achievements and lifestyles are broadcasted widely. This focus on individualism often detracts from collective values and communal thinking, promoting a culture where personal branding and self-interest overshadow community-oriented principles.

THE COMPETITIVE NATURE OF SOCIAL COMPARISON

Social media fosters an environment of constant social comparison, where users are frequently exposed to idealized versions of others' lives. This exposure can lead to feelings of inadequacy and envy, driving individuals to engage in one-upmanship rather than building genuine connections. The result is a culture that prioritizes personal success and recognition over collective well-being.

THE COMMODIFICATION OF THE SELF

The rise of influencer culture exemplifies the commodification of selfhood. Influencers build personal brands and monetize their online presence, often blurring the lines between personal expression

and commercial interests. This trend underscores the selfish nature of social media, where personal identity becomes a marketable product. The pursuit of followers, sponsorships, and monetization opportunities can overshadow authentic self-expression and meaningful community engagement.

ECONOMIC INCENTIVES AND ATTENTION ECONOMY

Social media operates within an attention economy, where user engagement is monetized through advertising revenue. Platforms incentivize behaviors that maximize user attention, often using algorithms that prioritize sensational, emotionally charged, or controversial content. These economic incentives align with and reinforce selfish behaviors, as users are driven to create content that attracts more attention rather than fostering meaningful interactions.

SURVEILLANCE CAPITALISM AND DATA EXPLOITATION

The collection and monetization of user data, known as surveillance capitalism, are central to social media business models. Platforms track users' online activities to deliver targeted advertisements and personalized content. This practice prioritizes profit over user privacy and well-being, reflecting the broader trend of self-interest within the industry. The exploitation of personal data underscores the selfish motivations driving social media companies.

MATERIALISM AND CONSUMERISM

Social media influences consumer behavior and lifestyle choices, often promoting materialism and conspicuous consumption. Influencers and targeted ads shape users' desires, encouraging purchases that align with curated online personas. This consumerist culture fosters a focus on personal gratification and status symbols, reinforcing the selfish nature of social media interactions.

IMPACT ON RELATIONSHIP QUALITY AND MENTAL HEALTH

The emphasis on self-presentation and validation-seeking can erode the quality of relationships on social media. Authentic connections require vulnerability and empathy, which can be compromised by the performative nature of online

interactions. Additionally, the pressure to conform to idealized standards and the fear of missing out (FOMO) contribute to anxiety, depression, and loneliness among users, highlighting the psychological costs of a selfish social media culture.

POLARIZATION AND ECHO CHAMBERS

Social media algorithms often amplify divisive and polarizing content, creating echo chambers where users encounter information reinforcing their existing beliefs. This fragmentation undermines constructive dialogue and mutual understanding, contributing to societal divisions and hindering collective problem-solving. The selfish tendencies of users, combined with profit-driven motives of platforms, exacerbate these issues.

PATHWAYS TO MITIGATION

- Addressing the inherent selfishness of social media requires a multifaceted approach. Educating users about the psychological and sociological dynamics of social media can foster more mindful and responsible usage. Digital literacy programs that emphasize critical thinking and ethical behavior are crucial for empowering individuals to navigate social media's impact on self-perception and relationships.
- Social media companies also have a role in mitigating selfish behaviors. Designing ethical platforms that prioritize user well-being, privacy, and genuine connections can help counteract the negative effects of selfish interactions. Features that promote positive engagement, limit addictive usage patterns, and protect user data are essential for fostering a healthier online environment.
- Initiatives that promote community engagement and collective action can shift the focus from individualism to communal values. Campaigns encouraging support for social causes, participation in community projects, and meaningful conversations can leverage social media's connectivity for collective good. By harnessing social media's potential for positive impact, users and platforms can work together to

counterbalance its inherent selfish tendencies.

EXAMPLES OF POSITIVE INITIATIVES

Several initiatives demonstrate how social media can be used for collective good. The "Selfie With Daughter" campaign in India aimed to promote gender equality by encouraging people to share selfies with their daughters. Similarly, the Swachh Bharat Abhiyan utilized social media to mobilize millions in cleanliness drives, while the Digital India initiative leveraged online platforms to enhance digital literacy and e-governance.

CONCLUSION

In conclusion, social media is a complex medium that reflects and amplifies both positive and negative aspects of human behavior. While it offers numerous benefits, it also fosters a culture of self-promotion and individualism. By promoting digital literacy, designing user-centric platforms, and encouraging community-oriented initiatives, society can harness social media's positive potential while mitigating its inherent selfishness. In doing so, social media can evolve into a tool that strengthens social connections and promotes collective well-being.



**UPSC
Mentorship**

A Unit of Mentorship India



GET IN TOUCH

+919999057869

www.upsmentorship.com

@mentorship.india

C – 103, Second Floor, Sector-2
Noida – 201301

contact@mentorshipindia.com