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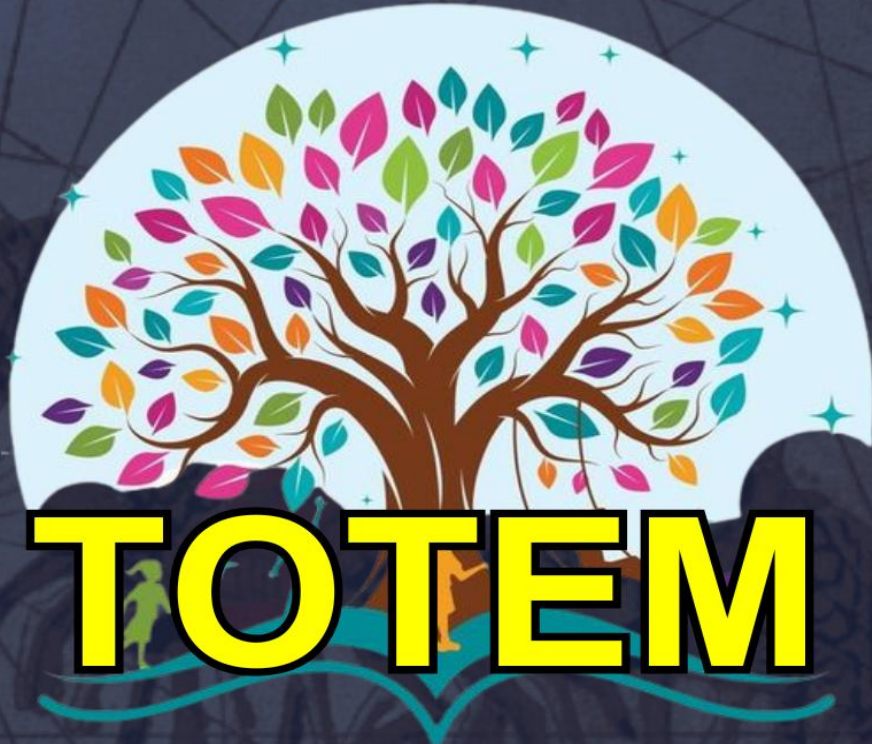
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PAPER - 1

PHYSICAL & ARCHAEOLOGICAL ANTHROPOLOGY

1. Google DeepMind's AlphaGenome AI Tool

(Use this content in the topic of syllabus – Unit 12 Paper I)

- Google DeepMind has launched AlphaGenome, an artificial intelligence tool designed to predict how genetic mutations influence gene regulation and contribute to human diseases.

Key Points

- **Objective:** The AI tool developed by Google DeepMind is used to analyse long DNA sequences and predict the biological impact of genetic variations. Primarily targets non-coding (regulatory) DNA regions, which constitute about 98% of the human genome and play a key role in gene regulation.
- **DNA Analysis Capacity:** Capable of analysing up to one million DNA base pairs simultaneously, allowing assessment of long-range genetic regulatory effects. Predicts effects of mutations on gene expression, RNA splicing, chromatin accessibility, and regulatory activity.
- **Helps to identify genetic drivers of complex diseases** such as cancer, cardiovascular disorders, autoimmune diseases, and neurological conditions. **Training Data:** Trained on large-scale public genomic datasets from humans and mice to identify patterns linking DNA sequences with biological outcomes. Acts as a virtual laboratory, enabling scientists to test genetic hypotheses before conducting costly and time-consuming biological experiments.
- **Availability:** Released for non-commercial research use through an Application Programming Interface (API) to support global scientific collaboration. **Limitations:** Not approved for clinical diagnosis or personalised medical treatment; predictions depend on quality and diversity of training data.

2. First prehistoric person with Turner syndrome identified from ancient DNA

(Use this content in the topic of syllabus – Unit 9.4 Paper I)

- Researchers from the Francis Crick Institute, in collaboration with the University of Oxford, University of York, and Oxford Archaeology, developed a new technique to more precisely measure chromosome numbers in ancient genomes.

Key Findings:

- **First Case of Turner Syndrome:** Identified the first prehistoric individual with mosaic Turner syndrome (one X chromosome) from about 2500 years ago. **Earliest Case of Jacob's Syndrome:** Discovered the earliest known person with Jacob's syndrome (XYY) from the Early Medieval Period.
- **Klinefelter Syndrome Cases:** Found three individuals with Klinefelter syndrome (XXY) from different time periods. **Infant with Down Syndrome:** Identified an infant with Down syndrome from the Iron Age.
- **Observations:** All identified individuals with chromosomal anomalies were buried

according to societal customs, with no grave goods to provide further insights into their lives. Individuals with Klinefelter syndrome showed signs of delayed puberty and were slightly taller than average. The individual with Turner syndrome likely did not undergo puberty despite their age.

- **Significance:** The study provides prehistoric evidence of various chromosomal conditions, offering insights into ancient perceptions of sex and gender. It advances the understanding of sex chromosome variations in ancient populations, moving beyond binary sex classifications.
- **Broader Implications:** The research opens new avenues for studying sex and gender diversity in past societies and suggests combining genetic data with archaeological context for a richer historical perspective. **Future Applications:** The new method can be applied to challenging archaeological remains and contaminated ancient DNA, enhancing the study of ancient human diversity.

3. Key features of Australopithecus

(Use this content in the topic of syllabus – Unit 7.2 Paper I)

- Australopithecus had a variable but plant-based diet, according to an analysis of stable isotope data from seven hominin specimens dating back 3.5 million years from Sterkfontein in South Africa.

Australopithecus:

- Australopithecus, (genus Australopithecus) is a group of extinct primates known from a series of fossils found at numerous sites in eastern, north-central, and southern Africa. They are the closest known relatives of our genus, Homo.
- The various species of Australopithecus lived 4.4 million to 1.4 million years ago (mya), during the Pliocene and Pleistocene epochs (which lasted from 5.3 million to 11,700 years ago).
- The genus name, meaning “southern ape,” refers to the first fossils found, which were discovered in South Africa. Perhaps the most famous specimen of Australopithecus is “Lucy,” a remarkably preserved fossilized skeleton from Ethiopia that has been dated to 3.2 mya.

Features:

- As characterized by the fossil evidence, members of Australopithecus bore a combination of humanlike and apelike traits. Members of this species had apelike face proportions (a flat nose, a strongly projecting lower jaw) and braincase (with a small brain, usually less than 500 cubic centimeters - about 1/3 the size of a modern human brain), and long, strong arms with curved fingers adapted for climbing trees.
- They also had small canine teeth like all other early humans, and a body that stood on two legs and regularly walked upright. They were roughly 1.2-1.5 m tall and probably weighed about 30-50 kg.
- Males were almost twice the size of females, a level of difference, or sexual dimorphism, greater than modern chimpanzees or humans but less than gorillas or orangutans. They had mainly a plant-based diet, including leaves, fruit, seeds, roots, nuts, and insects.

4. Human Evolution and Migration

(Use this content in the topic of syllabus – Unit 1.4 Paper I)

- Scientists have established that Homo sapiens evolved in Africa and later migrated to various parts of the world. The routes and timing of these migrations are still debatable among the scientists. The coastal dispersion theory suggests migration along coastlines, though it lacks strong archaeological evidence.

Route of Human Migration

- Genetic studies have provided insights into human evolution and migration patterns. By analyzing mitochondrial DNA mutations, scientists confirmed that Homo sapiens evolved in Africa over millennia before migrating globally. While scientists widely accept the out-of-Africa theory, they differ on the timing and routes of migration.
- Two Theories of Dispersion: Coastal Dispersion Theory: Studies suggest humans migrated along coasts, benefiting from warm climates, abundant food, and tropical conditions. Research in 2005 using mitochondrial DNA of 260 Orang Asli individuals (Tribe of Malaysia) indicated rapid coastal migration around 65,000 years ago, reaching Australia via the Indian Ocean. A 2020 study on 2,700-year-old DNA in Japan linked coastal migration to genetic affinities with Taiwanese tribes. Andaman Islands' settlements also correlate with coastal journeys.
- Challenges to the Theory: Archeological evidence in India contradicts this model. Inland Palaeolithic sites dominate, with no archeological traces along the Indian Ocean coastline to support coastal dispersion.
- Inland Dispersion Model: The inland dispersal model suggests that early humans migrated through interior terrestrial routes rather than coastal ones. Saurashtra Peninsula Study: Recent research analysed Middle Palaeolithic tools in the Bhadar and Aji river basins of Gujarat.

Conclusion

- The study offers new data but emphasizes the need for precise dating. Evidence challenges purely coastal migration theories but requires careful interpretation due to submerged sites and undated regions. The study also highlights broader dispersal in Saurashtra, covering coastal, hinterland, and inland areas, suggesting a multifaceted migration pattern. This detailed analysis of inland vs. coastal migration patterns continues to evolve, emphasizing the need for integrating genetic and archeological findings.

SOCIO - CULTURAL ANTHROPOLOGY

1. Debate on Exceeding the 50% Reservation Limit in India

(Use this content in the topic of syllabus - Unit 3.2 Paper I)

- The Supreme Court's review of quotas and political demands has revived debate on breaching the 50% reservation limit. The debate on the 50% reservation cap has been reignited, with petitions and political demands pushing for higher quotas and sub-categorisation of benefits.
- The question of whether reservations in India should exceed the judicially imposed 50% cap has resurfaced with growing political and social demands. Recent political statements, such as the call for 85% reservation in Bihar, coupled with petitions before the Supreme Court seeking 'creamy layer' provisions for SCs and STs, highlight the complexity of balancing affirmative action with constitutional guarantees of equality.

Constitutional Framework on Reservations

- Articles 15 and 16 of the Constitution guarantee equality before the law and equal opportunity in public employment, while simultaneously empowering the State to make special provisions for socially and educationally backward classes, Scheduled Castes (SCs), and Scheduled Tribes (STs). At the central level, reservations currently stand at: OBCs: 27%, SCs: 15%, STs: 7.5%, EWS: 10%. This brings the total reservation to 59.5%, already above the 50% ceiling set by judicial precedents but justified on grounds of EWS being a separate category.

Emerging Issues and Demands

- Unequal Distribution of Benefits: The Rohini Commission found that 97% of OBC reservation benefits were cornered by about 25% of castes, while nearly 1,000 OBC communities saw no representation. Similar concerns exist within SCs and STs, raising the demand for sub-categorisation.
- Creamy Layer Debate for SCs/STs: While OBCs have a creamy layer exclusion, SCs and STs do not. Critics argue that this results in relatively better-off groups monopolising benefits. Others counter that many SC/ST vacancies remain unfilled, making such exclusions counterproductive.
- Backlog of Vacancies: Government data indicates 40-50% of reserved seats across SC, ST, and OBC categories remain vacant, largely due to systemic gaps in recruitment and access.
- Experts suggest reforms such as: Sub-categorisation within OBCs and SC/ST groups to ensure fairer distribution of benefits. A "two-tier" system prioritising the most marginalised. Greater investment in skill development and employment creation, reducing overdependence on public-sector reservations

2. Endogamy in India: Cultural Practice & Health Implications

(Use this content in the topic of syllabus - Unit 2.3 Paper I)

- Endogamy, the practice of marrying within one's community, has deep social and genetic implications in India. A recent CSIR-CCMB study links it to population-specific diseases. Recently a study on the topic of Endogamy in India conducted by CSIR Bhatnagar Fellow at the CSIR-Centre for Cellular and Molecular Biology (CCMB) and senior scientist K.

Thangaraj has been published.

- It is deeply rooted in the country's cultural and social structures, particularly within caste and tribal communities. While endogamy has historically been seen as a way to preserve community identity, customs, and social cohesion, modern studies have highlighted its significant implications for genetic health.
- **Endogamy in India: A Cultural and Social Perspective:** Endogamy has traditionally played a vital role in maintaining social hierarchy and group identity in India. Some of the key factors influencing its practice include:
 - **Caste System & Social Structure:** The varna (caste) system in Hindu society promotes marriage within one's caste and sub-caste to maintain social status and hereditary occupations. Similar trends are observed among Muslim, Christian, and tribal communities, where intra-group marriages are encouraged to maintain religious and cultural identity.
 - **Regional & Linguistic Endogamy:** Certain linguistic groups in India also practice regional endogamy, restricting marriage within their own community to preserve cultural traditions and dialects. Example: The Tamil Brahmins, Gujarati Patels, and Marwari business communities follow strict endogamy.
 - **Economic & Political Influence :** Endogamous marriages help preserve family wealth, political power, and business interests by preventing external influences from diluting family assets and decision-making. Many business families in India, such as those in Gujarat and Rajasthan, prefer marrying within their communities for financial stability.
 - **Genetic Implications of Endogamy :** While endogamy has historically served as a means of cultural preservation, recent genetic research highlights its potential drawbacks. The CSIR-CCMB study found that marrying within small communities leads to a higher prevalence of genetic mutations, which increase the risk of hereditary diseases.

PAPER - 2

INDIAN & TRIBAL ANTHROPOLOGY

1. Education: Initiatives for empowerment of tribal communities

(Use this content in the topic of syllabus – Unit 9.1 Paper II)

- Education is the only mode to empower a community and help the youth to access unexplored opportunities offered by the global village. The Right to Education and inclusiveness of educational policies have always endeavoured to bridge the educational gaps particularly among the vulnerable communities.
- Tribal education in Jammu and Kashmir is receiving special focus both at school and higher education level, however, there's a long journey ahead which requires concerned efforts of all stakeholders.

Tribal Education Plan

- The department of tribal affairs, for the first time, initiated an exercise to assess the state of education viz a viz tribal students, literacy levels prevalent among the tribal population, and based on such surveys development of a comprehensive education plan to address specific educational needs besides the core efforts being made by the Education departments.
- There are several scholarship schemes for tribal students, including the National Scholarship Scheme (Top Class) For Higher Education of ST Students, the National Fellowship Scheme For Higher Education of ST Students, and the National Overseas Scholarships for Scheduled Tribe Students.
- Menstrual hygiene awareness :This program focuses on adolescent girls in rural and tribal areas to address misconceptions about menstruation and female health. The program aims to improve the girls' health and raise their self-esteem.
- Karta Initiative :This initiative from Tata Trusts aims to improve access to educational and employment opportunities for talented youngsters from low-income backgrounds.

Way Forward :

- These initiatives have acknowledged the need for very robust and focussed system of tribal education, need for inclusive education and development of special plans for different tribal areas and sections of communities given the poor educational and literacy levels.

2. Bridging the Gap in Tribal Welfare

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

Significance of Tribal Communities for India

- Custodians of India's Biodiversity and Forest Conservation: Tribals play a crucial role in preserving forests, wildlife, and biodiversity through their traditional knowledge and sustainable practices.
- Rich Cultural and Linguistic Heritage: India's tribal communities preserve diverse languages, art forms, folklore, and indigenous knowledge systems, enriching national identity.
- Vital for India's Economic and Agricultural Diversity: Tribals contribute significantly to

agriculture, minor forest produce (MFP) collection, and traditional crafts, strengthening India's rural economy.

- Significant Political Influence in Indian Democracy: With a population of over 104 million (Census 2011), tribals form a crucial voting bloc, impacting state and national elections.
- Essential for Climate Change Adaptation and Sustainable Development: Tribals possess deep traditional knowledge of climate adaptation, water conservation, and sustainable agriculture, which is crucial in combating climate change.
- Backbone of India's Traditional Medicine and Ayurveda: Tribal communities hold vast knowledge of herbal medicine, Ayurveda, and ethno-botanical practices, contributing to India's healthcare system.
- Critical for Sustainable Tourism and Eco-Tourism: Tribal regions are home to some of India's most biodiverse landscapes, making them key players in sustainable and eco-tourism.

Key Issues Faced by Tribal Communities in India

- Land Alienation and Displacement: Tribal communities face large-scale displacement due to industrial projects, mining, and conservation efforts, leading to loss of traditional livelihoods.
- Poor Health and Malnutrition: Tribal populations suffer from higher mortality rates, malnutrition, and lack of healthcare access, worsened by poor infrastructure in remote areas.
- Lack of Quality Education and EMRS Implementation Gaps: Tribal students face language barriers, poor infrastructure, and high dropout rates, especially in higher education.
- Loss of Indigenous Culture and Linguistic Marginalization: Tribal languages and cultural heritage are fast disappearing due to urbanization, lack of institutional support, and mainstreaming policies.

3. Ecocide vs. Genocide: Researchers are using the Onge tribe as a case study

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

- Ecocide vs. Genocide: Researchers are using the Onge tribe as a case study for how environmental destruction can facilitate the cultural and physical extinction of indigenous groups.
- In the context of the Onge tribe of Little Andaman, the distinction between ecocide and genocide is increasingly blurred, as the survival of the people is tied directly to the health of their ecosystem.
- The Conceptual Connection Ecocide: Refers to the extensive damage or destruction of ecosystems, often through industrialization or "development" projects. For the Onge, this includes the clearing of tropical forests and the depletion of traditional resources.
- Cultural Genocide: Because the Onge's social structure, religious beliefs, and language are rooted in their environment (e.g., their knowledge of medicinal plants and tidal patterns), the destruction of that environment effectively erases their culture without the need for direct violence.

The Onge Case Study Researchers argue that the Onge are facing a "slow-motion" extinction facilitated by:

- Resource Competition: The introduction of settlers and "fortress conservation" models has restricted the Onge's access to ancestral hunting grounds. Dietary Shift: As the local ecology

changes, the tribe has been forced to transition from a protein-rich forest diet to government-issued rations (rice and sugar), leading to a decline in physical health and fertility.

- Tsunami & Climate Change: The 2004 Tsunami drastically altered their coastal landscape. While their Traditional Ecological Knowledge (TEK) saved them during the event, the subsequent environmental shift has made traditional living more difficult.

About Onge Tribe

- Onges are one of the most primitive tribes in India. They belong to the Negrito racial stock. They are inhabiting Little Andaman Island, the most southerly island in the Andaman archipelago. They are semi-nomadic tribes and fully dependent on the food provided by nature. The religion of the Onges is simple animism.
- Neither ceremonial worship nor any kind of propitiation is practiced by them. They believe in different classes of spirits-spirits of the wood, the sea, disease, storm, and ancestors.
- The Onge speak their own language, which has no script. The colour of the teeth has a unique interpretation among Onges, who consider pearly white teeth a symbol of death.
- They continue to chew the bark to impart a red colour to their teeth. They now share the 732 sq km island with around 17,000 settlers from India, Bangladesh, and the Nicobar Islands.

4. Gujarat Launches India's First Tribal Genome Sequencing Project

(Use this content in the topic of syllabus – Unit 7.2 Paper II)

- Gujarat became the first Indian state to launch a Tribal Genome Sequencing Project to build a reference genetic database aimed at improving healthcare access for tribal populations.

Gujarat Launches India's First Tribal Genome Sequencing Project:

- A pioneering genomic research initiative to sequence the genomes of 2,000 tribal individuals across 17 districts of Gujarat to enhance precision medicine.
- Launched By: Implemented by the Gujarat Biotechnology Research Centre (GBRC). Objectives: To identify genetic risk markers linked to inherited disorders like: Sickle cell anaemia, Thalassaemia, Hereditary cancers.
- To develop personalised healthcare protocols based on tribal genetic profiles. To bridge the health equity gap using science-led tribal empowerment.
- Key Features: Involves advanced infrastructure for sample collection, sequencing, and data analysis. Focus on natural immunity markers and customised medical care.
- Engagement with tribal communities for inclusive consultation and awareness. Covers diverse tribal groups from 17 districts to ensure representation and diversity.

Significance:

- Healthcare Equity: Enables early detection and tailored treatment for genetic diseases in underserved communities. Data-Driven Public Health: Establishes a baseline genomic database for long-term health research and policy planning. National Replicability: Serves as a model for other Indian states to follow in building region-specific genomic policies.

5. Key points of 'PM-PVTG Development Mission'

(Use this content in the topic of syllabus – Unit 9.1 Paper II)

- The PM-PVTG Development Mission program aims to improve the socio-economic status

of Vulnerable Tribal Groups (PVTGs). For this, availability of Rs 15,000 crore for Scheduled Tribes has been envisaged in the Union Budget.

- The mission includes providing basic facilities like safe housing, clean drinking water and sanitation, education, health and nutrition, better access to roads in settlements for backward scheduled tribes.

Prime Minister PVTG Development Mission:

- It may be noted that Union Finance Minister Nirmala Sitharaman had announced 'Pradhan Mantri PVTG Development Mission' under the Union Budget 2023-24 on February 1, 2023.
- The Central Government has allocated Rs 15,000 crore under the 'Development Action Plan for Scheduled Tribes' to implement this mission in the next three years.

Particularly Vulnerable Tribal Groups (PVTGs):

- The Ministry of Home Affairs has classified 75 tribal groups in 18 states of the country and the Union Territory of Andaman and Nicobar Islands as Particularly Vulnerable Tribal Groups (PVTGs).
- PVTGs are the most vulnerable among the tribal groups. In 1975, the Government of India took the initiative to identify the most vulnerable tribal groups as a separate category called PVTGs.
- Initially 52 tribal groups were classified as PVTGs. In the year 1993, 23 additional tribal groups were included in this category, due to which there are currently 75 tribal groups under PVTG. Of the 75 listed PVTGs, the highest number are found in Odisha (13), followed by Andhra Pradesh (12).

6. Jharkhand Tribes Fight for Rights

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

- Tribals have played a vital role in Jharkhand's socio-political landscape and their struggles have sparked numerous historical movements.

Key Points

- British Control and Tribal Resistance in Jharkhand: Geographical Context: Jharkhand, primarily located on the Chota Nagpur Plateau in eastern India, came under British control in 1765 when the Mughals granted Diwani rights over Bengal, Bihar, and Orissa to the British, allowing them to collect revenue.
- Tribal Inhabitants: Jharkhand's plateau region has long been inhabited by tribes like the Munda, Santhal, Oraon, Ho, and Birhor, with agriculture forming the primary livelihood for over half of these tribal workers, exceeding the national Scheduled Tribe average of 44.7%.

Colonial Policies and Tribal Revolts:

- The British introduced commercial agriculture and mining, displacing many tribes from their lands. This exploitation led tribal leaders to organize movements to protect their rights and resist British rule.
- Scholars Ram Dayal Munda and Bisheshwar Prasad Keshari identified 1769-93 as the initial phase of resistance, followed by a period of open revolt in the succeeding decade.

Jharkhand Movement and Statehood:

- The late 1980s saw a resurgence of Jharkhand's identity, with the formation of the All Jharkhand Students Union (1986) and the Jharkhand Coordination Committee (1987),

leading to the Jharkhand Movement and eventual statehood in 2000.

- The Jharkhand Movement highlighted the gradual disintegration of Jharkhand culture over 200 years, particularly under British rule. Today, tribal communities continue to face challenges like land disputes, low literacy rates, poverty, and exploitation amidst industrial growth.

7.Challenges regarding Sickle Cell Eradication

(Use this content in the topic of syllabus – Unit 9.4 Paper I)

- The initiative aligns with India's broader commitment to eradicating sickle cell anemia, a hereditary blood disorder, by 2047, particularly focusing on tribal communities, which are disproportionately affected.
- Sickle Cell Disease (SCD) is a genetic blood disorder causing abnormal haemoglobin (the protein that carries oxygen through the body), resulting in sickle-shaped red blood cells. This leads to blocked blood flow, severe pain, organ damage, and reduced life expectancy.

Challenges Regarding SCD in India:

- India has the world's highest tribal population density, with 67.8 million people (8.6%) as per the 2011 Census. MoHFW highlights SCD among the top ten health issues impacting tribal communities disproportionately.
- Limited diagnostic and treatment facilities in remote tribal areas and lack of knowledge among communities about genetic counseling and preventive measures. Long-term SCD management can be financially taxing due to medication costs, regular check-ups, and hospitalisations.
- Treatments like CRISPR cost USD 2-3 million, and finding bone marrow donors is challenging.

Some Government Initiatives Related to SCD

- National Sickle Cell Anaemia Elimination Mission: Vision: The National Sickle Cell Anaemia Elimination Mission, announced in the Union Budget 2023, targets the health challenges posed by Sickle Cell Disease (SCD), especially among tribal populations. The mission aims to eliminate SCD as a public health issue in India by 2047.
- Strengthen Healthcare Infrastructure: Establish more specialised diagnostic and treatment centres in tribal regions. Educational Campaigns: Increase awareness about genetic diseases among tribal populations.

Conclusion

- India's focus on addressing health inequities in vulnerable populations, especially those affected by Sickle Cell Disease (SCD), reflects the government's commitment to public health and tribal welfare. This initiative aligns with UN Sustainable Development Goals (SDGs) to create a healthier and more equitable society.

8. Key features of Cia-Cia Tribe

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

- Cia-Cia tribe: The Cia-Cia tribe on Buton Island, Indonesia, is using Hangul, the Korean alphabet, to document and preserve their indigenous language, which has survived orally for centuries but lacks its own script.
- Indigenous community in Buton Island, Indonesia, with a population of around 93,000.

Language status: The Cia-Cia language has existed orally for centuries without a formal script, making it vulnerable to extinction.

- Preservation efforts: To prevent language loss, Cia-Cia is being transcribed using Hangul, which aligns closely with its phonetic structure.

About Hangul Script:

- Structure: Known for its unique phonetic system of circles and lines, representing sounds clearly. Adoption for Cia-Cia: Introduced in 2009 for Cia-Cia as Arabic script did not suit the language's sounds.
- Implementation: Used in schools, textbooks, and public signs in Cia-Cia areas.
- Cultural concerns: While some fear cultural influence, others believe the adaptation helps preserve Cia-Cia's uniqueness.

9. Totems as Symbols of Political Resistance

(Use this content in the topic of syllabus – Unit 5 Paper I)

- Assertion of Territorial Sovereignty: Tribes use totemic symbols (like the Sarna flag or specific animal carvings) to mark ancestral boundaries, signaling to the state and corporations that the land is "owned" by a spiritual lineage rather than being "vacant" government property.
- Challenge to "Fortress Conservation": By citing totemic taboos (e.g., the Bishnoi protecting blackbucks or the Dongria Kondh protecting Niyamgiri), tribes argue that their presence is essential for the survival of the species, challenging the government's model of "people-free" forests.
- Legal Shield under the FRA (2006): Under the Forest Rights Act, tribes use their totemic relationship with specific trees or animals as physical evidence of "long-term occupation," helping them secure Community Forest Rights (CFR) against industrial takeover.
- Resistance to Cultural Homogenization: In the face of "Sanskritization" or "Westernization," the public display of totemic rituals acts as a political statement of Adivasi identity, refusing to be absorbed into a singular national religious identity.
- Totemic Ecology as "Right to Life": Activists argue that destroying a totemic site (like a sacred grove) is not just property damage but a violation of the Article 21 (Right to Life), as the tribe's spiritual and physical life is inseparable from their totem.
- The "Pathalgadi" Movement Strategy: In Jharkhand and Chhattisgarh, the carving of totemic motifs on stone slabs (Pathalgadi) is used to display constitutional provisions of the Fifth Schedule, essentially using a totemic medium to declare village-level autonomy.
- Political Mobilization and Voting Blocs: Totemic affiliations are increasingly used to unify fragmented clans into a cohesive political force, allowing tribes to negotiate better terms for compensation or rehabilitation during mining projects.
- Repatriation as Post-Colonial Justice: The global movement to bring home "stolen" totems (like the Nisga'a pole) is a political demand for the decolonization of history, forcing national governments to acknowledge past cultural thefts.

10. Maximum Cases of SCs Denied Access to Public Spaces in Uttar Pradesh : NCRB

(Use this content in the topic of syllabus – Unit 7.1 Paper II)

- According to the NCRB's 2023 Crime in India report, 180 cases were registered under the SC/ST (Prevention of Atrocities) Act for denying Scheduled Castes access to public spaces, with a staggering 173 cases (over 96%) reported from Uttar Pradesh alone.

Key Points:

- Trend in SC Discrimination: Since 2017, cases involving SCs being denied access to public spaces — such as community areas, common lands, and social venues — have risen, highlighting ongoing social exclusion despite legal safeguards.
- Uttar Pradesh accounts for the lion's share of such incidents, suggesting deeper challenges related to caste-based exclusion in public life within the state.
- Other reports show that complaints related to denial of access to public spaces, social boycotts, and caste-based abuse form a significant portion of calls to the National Helpline Against Atrocities since 2021, with UP reporting the highest volume of calls.
- SC/ST Act: The Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989 prohibits denial of access and other discriminatory acts against SCs, making such offences punishable.
- Constitutional Rights: The Constitution of India guarantees equality before law and prohibits discrimination on the basis of caste, including in public spaces, under Articles 14 and 15.
- Social Exclusion: Despite legal protections, historical caste discrimination persists socially and culturally, leading to continued incidents where SCs face exclusion from public services and community facilities. Significance: Highlights gaps in law enforcement, regional disparities, and need for stronger protection of SC rights.

11.Homo sapiens originate from two or more African paleo-populations

(Use this content in the topic of syllabus – Unit 5 Paper I)

- Rejection of a Single "Cradle": Genomic and fossil evidence now suggests that Homo sapiens did not emerge from a single point (like East Africa or South Africa) but from a network of interacting populations spread across the continent.
- The "Weakly Structured" Stem Model: A landmark 2023 study published in Nature used genomic modeling to show that humans descended from at least two or more distinct paleo-populations that had been separated for hundreds of thousands of years.
- Continuous Gene Flow: These populations were not isolated species. Instead, they remained "weakly structured," meaning they lived apart for long periods but frequently met and interbred, exchanging genes and cultural innovations.
- Morphological Diversity (The Pan-African Mosaic): Early Homo sapiens fossils (like Jebel Irhoud in Morocco, dated to 315,000 years ago) show a mix of "modern" and "archaic" features. This diversity exists because different traits evolved in different regions and merged over time.
- Climate-Driven Migration: The "Green Sahara" episodes and changing vegetation acts as "pumps," periodically allowing isolated groups to move across the continent and merge, then separating them again as deserts returned.
- Genetic Divergence Timeline: DNA modeling indicates that the split between these ancestral groups occurred roughly 120,000 to 1,000,000 years ago, long before the recognized emergence of "anatomically modern" humans.

- No "Speciation Event": This theory suggests there was no single "eureka" moment where a new species suddenly appeared. Rather, "modernity" was a gradual accumulation of traits from various ancestral stems.
- Evidence from Ancient Genomes: By analyzing the DNA of modern Africans (such as the Nama and Mende people), scientists found "ghost" lineages—genetic signatures of these paleo-populations that no longer exist in pure form.
- Technological Exchange: The Middle Stone Age (MSA) toolkits show synchronous advancements across Africa. This suggests that ideas (not just genes) were being traded across vast distances between these disparate groups.

12. Elections to the Garo Hills Autonomous District Council have been postponed

(Use this content in the topic of syllabus – Unit 7.1 Paper II)

- The elections to the Garo Hills Autonomous District Council (GHADC) in Meghalaya have been postponed following unrest linked to a February 2026 GHADC notification mandating that all candidates must possess a Scheduled Tribe (ST) certificate to contest elections.
- Opposition from Non-Tribal Communities: Non-tribal residents of the plains belt, largely Muslim communities, opposed the rule as unconstitutional and exclusionary, arguing it restricts democratic participation and political rights in five Muslim-dominated GHADC constituencies, and contend that only Parliament can amend provisions under the Sixth Schedule.
- ADCs in Meghalaya: In Meghalaya, there are three ADCs, viz., Garo Hills ADC, Khasi Hills ADC and Jaintia Hills ADC. Each ADC has 30 members, 29 of whom are elected by the people, and one member each is nominated and holds office at the pleasure of the Governor.
- Coordination: The District Council Affairs Department of the State Government acts as the coordinating department between the District Councils and other Government Departments of the State Government.

Autonomous District Councils

- Administrative Structure: Sixth Schedule areas (tribal areas in the four northeastern states of Assam, Meghalaya, Tripura, and Mizoram) are organised into Autonomous Districts and Autonomous Regions, each governed by District Councils and Regional Councils. The Governor can create, alter, or reorganise these units.
- Composition and Tenure: An Autonomous District Council (ADC) can have up to 30 members (26 elected and 4 nominated by the Governor) with a five-year tenure for elected members. The Bodoland Territorial Council is an exception with 46 members.
- Legislative Powers: Councils can make laws on land, forests (excluding reserved forests), inheritance, marriage, social customs, and regulation of moneylending and trade by non-tribals, subject to the Governor's assent.
- Applicability of Laws: Central and State laws do not automatically apply to Sixth Schedule areas. Their applicability depends on Governor's notification or Presidential notification, depending on the state.

13. Role of Tribals in Shaping India's Socio-cultural and Developmental Fabric

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

- Cultural Preservation and Rich Heritage: Tribal communities have played a pivotal role in preserving India's rich cultural diversity, contributing significantly to the country's

- folklore, traditions, and artistic expressions.
- Their deep connection to nature and unique customs serve as a vital counterbalance to the homogenizing forces of modernization. For instance, the Gond and Bhil tribes are famous for their vibrant art, which is now gaining global recognition.
 - The Warli tribe, known for their distinct folk art, also contributes to the cultural fabric of India, with their intricate wall paintings depicting daily life and nature.
 - Environmental Stewardship and Biodiversity Conservation: Tribal communities, especially in forested regions, have been at the forefront of environmental stewardship, protecting biodiversity through traditional knowledge systems. Their sustainable practices in resource management have ensured the survival of crucial ecosystems.
 - The tribals' role as the guardians of forests can be seen in regions like Bastar (Chhattisgarh), where local tribal communities have actively opposed deforestation for mining.
 - Also, the Dongria Kondh tribe in Odisha is renowned for their efforts in protecting the Niyamgiri hills, fighting against the bauxite mining project that threatened their sacred lands.
 - Contribution to India's Agricultural Landscape: Tribal communities have significantly contributed to the evolution of India's agricultural practices, often being the first adopters of organic farming methods.
 - Their deep-rooted knowledge of the land, crops, and natural fertilizers has informed sustainable agricultural practices, which have proven to be resilient in harsh conditions.
 - For instance, the Munda tribe, in Jharkhand, is another example, known for their traditional agricultural practices, such as mixed cropping, which ensures soil fertility and sustainability.
 - Economic Contribution through Tribal Entrepreneurship: Tribal populations are increasingly contributing to India's economy, particularly through entrepreneurship and local industries such as handicrafts, textiles, and herbal medicines.
 - The government's initiatives like TRIFED (Tribal Cooperative Marketing Development Federation of India) have facilitated market access for tribal products. This has not only provided economic sustenance for tribal communities but also introduced their indigenous products to global markets.

14.OIL & NSTFDC signed MOU to Boost Tribal Healthcare

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

- Oil India Limited (OIL) signed a Memorandum of Understanding (MoU) with the National Scheduled Tribes Finance and Development Corporation (NSTFDC) — a company under the Ministry of Tribal Affairs — to strengthen and augment healthcare facilities in tribal areas of Rajgarh district, Madhya Pradesh.

Key Points:

- Funding: OIL has sanctioned 86.27 lakh for improving health facilities at Community Health Centres (CHCs) and Primary Health Centres (PHCs) in tribal areas. Target Beneficiaries: The project will primarily benefit tribal populations and underserved communities in Rajgarh, an Aspirational District, ensuring better access to healthcare services. Healthcare Infrastructure Upgradation: Provision of ambulances to improve emergency response.
- Supply of life-care and diagnostic equipment for better treatment facilities. Advanced life-

support machines including ventilators, CPAP/BiPAP machines, and USG machines. Public-Private Collaboration: The initiative represents a partnership between a government-owned enterprise (OIL) and a statutory body (NSTFDC), demonstrating an efficient model for regional healthcare development.

- Alignment with National Initiatives: Supports the government's goal of inclusive and equitable development, in line with broader national visions for tribal welfare and the Viksit Bharat Mission. Long-term Impact: The initiative is expected to enhance: Health outcomes in tribal regions.
- Emergency medical response. Overall quality of care, reducing disparities in healthcare access. Replication: This model can be replicated in other tribal regions to strengthen healthcare delivery through joint collaboration between public sector organisations and government corporations.

15. Tension between state-led conservation and indigenous land rights of Jenu Kuruba Tribe

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

- Identity and Habitat: The Jenu Kuruba (meaning "honey gatherers") are a Particularly Vulnerable Tribal Group (PVTG) who have lived in the forests of the Western Ghats, specifically the Nagarahole region, for centuries.
- Encroachment Label: In early 2025, the Karnataka Forest Department labeled several Jenu Kuruba settlements as "illegal encroachments," despite the tribe's ancestral links to the land.
- Forced Evictions: Using the "encroacher" label, authorities conducted demolition drives, destroying traditional huts and displacing families during monsoon periods, leading to a humanitarian crisis.
- FRA Violations: The tribe argues that these evictions directly violate the Forest Rights Act (FRA) of 2006, which legally recognizes the rights of forest-dwelling communities to their ancestral lands.
- Pending Claims: A major point of contention is that many Jenu Kuruba families have pending individual and community land claims under the FRA that the state has failed to process or settle.
- Conservation vs. People: The government justifies the evictions under the guise of wildlife protection (Nagarahole is a Tiger Reserve), creating a "fortress conservation" model that excludes indigenous people.
- Loss of Livelihood: Displacement has cut off the tribe from their traditional economy—primarily honey collection and gathering minor forest produce—forcing many into low-wage manual labor.
- Cultural Erasure: Anthropologists note that removing the tribe from the forest destroys their sacred groves and spiritual connection to the landscape, threatening their unique cultural identity.
- Resistance Movements: The crisis sparked massive protests led by tribal leaders and activists, who used the slogan "Our Forest, Our Right" to demand an immediate halt to the demolitions.
- Legal Deadlock: While the Karnataka High Court has been petitioned to intervene, the delay in legal relief highlights the institutional bias and lack of administrative will to implement tribal welfare laws.

16. High burden of malnutrition among the Tribal communities of the state

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

- Disproportionate Burden: Malnutrition is heavily concentrated in tribal communities. In states like Gujarat, the worst-affected districts for stunting (e.g., Dahod at 55.3%) and wasting (e.g., The Dangs at 40.9%) are all tribal-dominated.
- High Prevalence Rates: Recent meta-analyses indicate that the pooled prevalence of underweight among tribal children is approximately 43.78%, while stunting affects 43.16%.
- Severe Stunting Gap: While mild stunting rates are similar across groups, the prevalence of severe stunting is nearly twice as high in tribal children (16%) compared to non-tribal children (9%).
- Substandard Food Quality: Reports indicate that food supplied through government schemes (THR/SN) is often inadequate, sometimes found contaminated with insects or stones, and lacks essential food groups beyond carbohydrates.
- Systemic PDS Failures: In many tribal belts, the Public Distribution System (PDS) is irregular, with deliveries occurring only once every three months, and approximately 20% of families lack ration cards.
- Maternal Health Links: Tribal women suffer from high rates of chronic energy deficiency (over 40%) and anaemia, leading to high proportions of low-birth-weight babies (approx. 41.4% in some areas).
- Loss of Traditional Livelihoods: Deforestation and restrictive forest laws have "robbed" many communities of traditional, nutrient-rich food sources, forcing a shift to less diverse diets.
- Migration Impacts: Frequent seasonal migration for work often interrupts children's access to free meals provided by Anganwadi centres in their home villages.
- Infrastructure Deficits: Many Anganwadi Centres (AWCs) in tribal areas lack basic facilities; for instance, some reports found nearly 47 AWCs in one study had unusable or no toilets.
- Impact on Development: Chronic deprivation affects an estimated 4.7 million tribal children, resulting in permanent damage to cognitive abilities, school performance, and lifelong productivity.

17. Key Recommendations for Social Enhancement of Paliyar Tribe

(Use this content in the topic of syllabus – Unit 7.2 Paper II)

- Administrative Representation: There is a strong call for the establishment of a separate government department and the appointment of a dedicated cabinet minister for tribal welfare in Tamil Nadu to ensure focused policy implementation for communities like the Paliyars
- Access to Government Employment: Data indicates a severe lack of representation in the public sector; reports from 2026 noted that among 1,173 surveyed families, not a single individual had secured a government job. Advocates suggest dedicated coaching for TNPSC exams to address this.
- Housing and Infrastructure: While some have received government-donated houses, many still live in thatched huts or temporary shelters. There is an urgent plea for permanent

settlements equipped with electricity, as nearly 93% of some surveyed groups remain without it.

- Health Services Integration: Over 60% of the community members have never visited a hospital, largely due to long distances (walking 5–9 km) and a strong preference for natural botanical medicines. Proposed solutions include mobile health clinics and equipping PHCs with telemedicine.
- Educational Reform: To reduce high dropout rates caused by cultural and language barriers, NGOs are introducing bridge programs and mobile schools that integrate Paliyar oral traditions and indigenous knowledge into the curriculum.
- Livelihood Diversification: Traditional hunter-gatherer roles are shrinking due to forest regulations. New strategies focus on commercializing Non-Timber Forest Products (NTFPs) like honey and medicinal plants through scientific value-addition and youth training.
- Implementation of Forest Rights (FRA): While the Forest Rights Act (FRA), 2006 provides legal safeguards against eviction, there are calls for the review of rejected claims and the conversion of settled tribal areas into revenue villages to grant formal land ownership.
- Nutritional Security: Malnutrition and infant mortality remain concerns. Advocates suggest including millets, pulses, and oils in the Public Distribution System (PDS) to supplement the community's rice-heavy diet.

18. Key Problems with Sub-Caste Reservation

(Use this content in the topic of syllabus – Unit 7.1 Paper II)

- Fragmentation of Unity: Critics argue that sub-classification could weaken the collective identity and solidarity of the Dalit and tribal movements, leading to further internal divisions.
- Lack of Reliable Data: There is a significant lack of updated, scientific socio-economic data on sub-groups, making it difficult for states to objectively justify specific quotas.
- Political Misuse: There are concerns that sub-classification may be used as a tool for "vote bank politics" or political appeasement rather than genuine social upliftment.
- Intra-Community Conflict: Sub-categorization can exacerbate tensions as different sub-groups compete for a limited "quota pie," potentially leading to social friction and civil strife.
- Administrative Complexity: Creating and managing numerous sub-categories adds a heavy burden on government agencies, requiring extensive resources for documentation and verification.
- Risk of "Dereservation": If reserved seats are specifically allocated to the most marginalized sub-groups who lack access to quality education, those seats may remain unfilled due to a lack of "suitable" candidates, potentially leading to the loss of those reserved positions.
- Legal Challenges: Despite the 2024 Supreme Court ruling (State of Punjab v. Davinder Singh) allowing sub-classification, state decisions remain subject to judicial review, which can lead to prolonged legal battles over empirical evidence.
- Inadequate Focus on Root Causes: Some experts argue that under-representation is due to a lack of education and capital assets rather than discrimination by other sub-castes; therefore, simply adjusting quotas without improving educational infrastructure may be ineffective.
- "Creamy Layer" Dilemma: The introduction of the "creamy layer" principle to SC/ST categories—where affluent individuals are excluded—is controversial, as many argue that

social discrimination persists regardless of economic status.

19.Key Points on the Gaddi Community

(Use this content in the topic of syllabus – Unit 7.1 Paper II)

- Geographic Heartland: They are traditionally associated with the Bharmour region of Chamba district in Himachal Pradesh, often referred to as "Gaderan" or the "Land of Gaddis".
- Transhumance Lifestyle: The Gaddi are agro-pastoralists who practice transhumance, moving their flocks of sheep and goats between low-altitude valleys in winter and high-altitude alpine pastures (up to 14,000 feet) in summer.
- Spiritual Identity: They are ardent devotees of Lord Shiva, believing they were created by him while he sat on his gaddi (throne). Their home is often called "Shivbhoomi".
- Social Structure: The term "Gaddi" is a generic name for a group that includes various castes like Brahmins, Rajputs, Khattris, and Thakurs. Despite this stratification, they share a strong collective tribal identity.
- Traditional Attire: Men: Wear the Chola (a long woolen coat) tied with a Dora (a black woolen rope that can be up to 60 meters long). Women: Wear a colorful, pleated dress called a Luanchari.
- Language: They speak Gaddiyali, a Western Pahari dialect. Historically, they used the Tankri script, though Devanagari is now common.
- Economic Backbone: Their wealth is primarily measured in livestock, termed Dhan (literally meaning money). Sheep and goats provide milk, meat, and wool for traditional handicrafts.
- Unique Rituals: The Nuala is a significant thanksgiving ceremony dedicated to Lord Shiva, involving ritual sacrifices and oracles (Sippi chelas) who enter a trance.
- Role of Women: Gaddi women are considered highly empowered; they manage agriculture, livestock, and households while men are away with the flocks. They often have significant control over family finances.
- Modern Challenges: The community faces pressures from climate change affecting pasture quality, shrinking traditional grazing routes due to forest laws, and a younger generation increasingly moving toward settled jobs in cities.

20.Key Points on the Idu Mishmi Community

(Use this content in the topic of syllabus – Unit 6.3 Paper II)

- Tigers as "Elder Brothers": According to Idu mythology, the first Idu and the tiger were born to the same mother. This kinship makes killing a tiger a strict taboo, equivalent to homicide.
- Animistic Worldview: Their traditional belief system, called Iyu-ena, is centered on animism. They believe all of nature is inhabited by spirits (Uyu) that must be appeased through rituals.
- The "Igu" (Shaman): The Igu is a central figure who acts as a mediator between the human and spirit worlds. They perform complex shamanic dances and healing rituals using traditional drums and bells.
- Expert Weavers: Idu women are famous for their skill on backstrap (loin) looms. In 2019, Idu Mishmi Textiles received a Geographical Indication (GI) tag.

- **Distinctive Appearance:** They are often identified by their unique "pudding-basin" hairstyle (cut straight around the head) and heavily patterned black-and-white costumes featuring diamond and zigzag motifs.
- **Reh Festival:** Their most important festival, Reh, is celebrated in February to appease the divine mother Nanyi Inyitaya. It involves the sacrifice of Mithun (a semi-domesticated cattle), which also serves as a symbol of wealth and social status.
- **Communal Longhouses:** Families traditionally live in long, rectangular houses raised on stilts. A single house may accommodate an entire joint family, with each unit having its own central hearth—a sacred space for both cooking and rituals.
- **Endangered Language:** The Idu Mishmi language is a Tibeto-Burman dialect considered "critically endangered" by UNESCO. Recent efforts focus on developing a Roman-based script to preserve their oral traditions.
- **Resistance to Tiger Reserves:** The community has strongly opposed declaring the Dibang Wildlife Sanctuary as a Tiger Reserve. They fear that top-down government conservation will restrict their ancestral land rights and traditional livelihoods.
- **Community Conserved Areas (CCA):** Instead of state-run reserves, the tribe advocates for CCAs, where conservation is governed entirely by local populations using traditional knowledge of the forest.

21.Key Points on Eradicating Sickle Cell & Anemia

(Use this content in the topic of syllabus – Unit 6.3 Paper II)

- **Mass Screening Target:** The mission targets the universal screening of 7 crore individuals aged 0–40 years in 278 affected tribal districts by the 2025–26 fiscal year. As of July 2025, over 6 crore screenings have already been completed.
- **Three-Pillar Strategy:** The elimination efforts rest on Health Promotion (awareness and genetic counseling), Prevention (universal screening and early detection), and Holistic Management (continuum of care at all healthcare levels).
- **Genetic Status Cards:** Following screening, individuals are issued Sickle Cell Status Cards (Genetic Cards) in local languages. These help prospective partners determine if their future children are at risk, facilitating pre-marital and pre-natal counseling.
- **Early Intervention & Newborn Screening:** Specialized labs, such as the one at AIIMS Bhopal, have been established for newborn screening to ensure early identification and management from birth.
- **Point-of-Care Testing (POCT):** To reach remote areas, the mission utilizes validated POCT kits that provide rapid and reliable confirmatory results directly in the field.
- **Access to Essential Medicine:** Hydroxyurea, a critical drug for reducing pain crises and complications, has been added to the National Health Mission (NHM) Essential Drugs List to ensure it is available for free at primary health centers.
- **Centres of Excellence (CoE):** The Ministry of Tribal Affairs has approved 15 Centres of Excellence across 14 states to provide advanced diagnosis, specialized treatment, and research facilities.
- **Financial & Nutritional Support:** Some states provide direct financial aid, such as Maharashtra's monthly support of 1,000 for SCD patients. Additionally, Anemia Mukta Bharat strategies provide folic acid and iron supplementation and periodic deworming.
- **Mobile Medical Units (MMUs):** Under the PM-JANMAN mission, nearly 700 MMUs are

operational in Particularly Vulnerable Tribal Group (PVTG) areas to conduct on-site screening and provide basic healthcare.

22. First prehistoric person with Turner syndrome identified from ancient DNA

(Use this content in the topic of syllabus – Unit 9.4 Paper I)

- Researchers from the Francis Crick Institute, in collaboration with the University of Oxford, University of York, and Oxford Archaeology, developed a new technique to more precisely measure chromosome numbers in ancient genomes.

Key Findings:

- First Case of Turner Syndrome: Identified the first prehistoric individual with mosaic Turner syndrome (one X chromosome) from about 2500 years ago.
- Earliest Case of Jacob's Syndrome: Discovered the earliest known person with Jacob's syndrome (XYY) from the Early Medieval Period.
- Klinefelter Syndrome Cases: Found three individuals with Klinefelter syndrome (XXY) from different time periods. Infant with Down Syndrome: Identified an infant with Down syndrome from the Iron Age.
- Observations: All identified individuals with chromosomal anomalies were buried according to societal customs, with no grave goods to provide further insights into their lives. Individuals with Klinefelter syndrome showed signs of delayed puberty and were slightly taller than average. The individual with Turner syndrome likely did not undergo puberty despite their age.
- Significance: The study provides prehistoric evidence of various chromosomal conditions, offering insights into ancient perceptions of sex and gender. It advances the understanding of sex chromosome variations in ancient populations, moving beyond binary sex classifications.
- Broader Implications: The research opens new avenues for studying sex and gender diversity in past societies and suggests combining genetic data with archaeological context for a richer historical perspective.
- Future Applications: The new method can be applied to challenging archaeological remains and contaminated ancient DNA, enhancing the study of ancient human diversity.

23. Ministry of Tribal Affairs : Implementation of Van Dhan Yojana in Jammu & Kashmir

(Use this content in the topic of syllabus – Unit 7.2 Paper II)

- The Ministry of Tribal Affairs informed about the implementation of the Van Dhan Yojana in Jammu and Kashmir, under the Government of India's Pradhan Mantri Janjatiya Vikas Mission (PMJVM), aimed at strengthening tribal livelihoods through value-addition and marketing of tribal products.

Key Points:

- Scheme: The Van Dhan Yojana operates under the Pradhan Mantri Janjatiya Vikas Mission (PMJVM). Supports tribal communities by fostering livelihoods through optimal utilisation of natural resources, value addition, marketing linkages, and sustainable enterprises.
- Status in Jammu & Kashmir: As of March 2026, 100 Van Dhan Vikas Kendras have been sanctioned in Jammu & Kashmir, with a total sanctioned amount of 14.57 crore; out of these, three VDVVs are operational.

- Institutional Support: Financial assistance is provided through the Tribal Cooperative Marketing Development Federation of India Limited (TRIFED) for establishing Van Dhan Vikas Kendras (VDVKs), which engage tribal members in processing and marketing tribal products. Across India, TRIFED has sanctioned ₹612.27 crore for the establishment of 4,125 VDVVs.
- Focus: The scheme promotes an enterprise-based approach to generate additional income for Self-Help Groups (SHGs) and tribal beneficiaries through activities such as collection, training, processing, packaging, branding, and marketing of value-added products.
- Marketing & Branding: TRIFED also empanels tribal artisans, SHGs, and cooperatives to procure tribal products and markets them through 116 TRIBES India outlets, e-commerce platforms, and exhibitions like Aadi Mahotsav and Aadi Bazaar.
- Significance: By integrating tribal producers into formal value chains and organised marketing, the Van Dhan Yojana aims to enhance livelihoods, strengthen tribal communities' economic resilience, and improve market access for tribal products.

24. Supreme Court Rule on SC Status and Religious Conversion

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

- The Supreme Court of India in *Chinthada Anand v. State of Andhra Pradesh* (2026) ruled that a person professing any religion other than Hinduism, Buddhism, or Sikhism cannot be recognised as a member of a Scheduled Caste (SC) community.
- The Court clarified that conversion to any other religion (such as Christianity or Islam) results in the "immediate and complete loss of Scheduled Caste status from the moment of conversion, regardless of birth."
- What did the Supreme Court Rule on SC Status and Religious Conversion? Immediate Loss Upon Conversion: The two-judge bench ruled that conversion to any religion outside of Hinduism, Sikhism, or Buddhism (such as Christianity or Islam) results in the "immediate and complete loss" of SC status from the exact moment of conversion. This happens regardless of the caste the person was born into.
- The Concept of "Professing": The Court clarified that "professing" a religion means publicly practicing it. Because religions like Christianity and Islam do not theologically recognize the caste system, a person cannot publicly practice them while simultaneously claiming SC status to secure statutory benefits. The two are mutually exclusive.
- Loss of Statutory Protection: As a result of losing SC status, a convert cannot claim protection under specialized laws meant for Scheduled Castes, such as the SC/ST (Prevention of Atrocities) Act, 1989.
- Rules for Reconversion: If a convert wishes to reclaim their SC status by reconverting to Hinduism, Sikhism, or Buddhism, they must provide strict, unimpeachable proof. This includes demonstrating genuine renunciation of the converted religion, adoption of original caste practices, and clear acceptance back into the original caste community.

Way Forward

- Reliance on Empirical Data: The resolution of this complex issue must be guided by objective, contemporary data rather than ideological stances. The findings of the ongoing Justice K.G. Balakrishnan Commission will be crucial in scientifically determining whether the historical disabilities of untouchability actually persist among Dalit converts to Christianity and Islam.

- Re-evaluating the Framework of Backwardness: Policymakers could explore aligning the criteria for Scheduled Castes with those of Scheduled Tribes (STs) and Other Backward Classes (OBCs), which are religion-neutral. If social and educational backwardness is the core metric for affirmative action, a transition toward religion-agnostic criteria may better serve the spirit of Article 14 (Right to Equality).

25.NCRB data on Denial of Public Spaces to Scheduled Castes

(Use this content in the topic of syllabus – Unit 7.1 Paper II)

- Data from the National Crime Records Bureau Crime in India 2023 report highlights a rise in cases where Scheduled Castes (SCs) were denied access to public spaces under the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989.
- NCRB Data on Denial of Access to Public Spaces Out of 180 cases of denial of access to public spaces reported nationwide, 173 were from Uttar Pradesh, making the state a clear outlier in this category. The trend has been rising since 2017, largely driven by increased reporting and registration of cases in Uttar Pradesh.
- The State's share in total reported cases rose from about 68% in 2018 to nearly 80% in 2019. The concentration became even more pronounced in 2022, when over 98% of all such cases reported nationwide came from Uttar Pradesh. In comparison to SCs, cases involving Scheduled Tribes (STs) being denied access to public spaces remain relatively low across the country.
- What are the Underlying Reasons for the Denial of Public Spaces? Caste-Based Spatial Segregation: In many rural areas, informal caste geographies still exist where dominant castes control temples, water bodies, cremation grounds, and village pathways.
- Despite modernization, orthodox notions of ritual purity dictate access to specific public goods, particularly water sources and religious sites. The entry of an SC individual is still perceived by conservative elements as "polluting" the shared commons. Such practices reflect continuing forms of untouchability, despite its abolition under Article 17 of the Constitution of India, and undermine the anti-discrimination guarantee of Article 15 which ensures equal access to public spaces.
- Dominance of Local Power Structures: Village governance structures and informal caste councils often reinforce social hierarchy. The vast majority of rural SC populations remain landless agricultural laborers.
- Land ownership and economic dependence allow dominant groups to enforce exclusion through intimidation or social boycott to deter marginalized groups from claiming their legal rights to public spaces.
- Weak Enforcement of Anti-Atrocity Laws: Although the SC/ST (Prevention of Atrocities) Act, 1989 criminalizes the denial of access to public spaces for Scheduled Castes, gaps in enforcement continue to persist.

26.Study Sheds Light on the Origins of the Nicobarese People

(Use this content in the topic of syllabus – Unit 9.1 Paper II)

- New study decodes when the Nicobarese people came to the island. Scientists believed the Austroasiatic ancestors of the Nicobarese community migrated to the island more than 11,000 years ago.
- The new study showed that they arrived at the island around 5,000 years ago. Due to its geographical isolation, the ancient Nicobarese tribe has preserved its genetic identity

without significant admixture with different populations.

- By comparing the differences in mutations between the genetic ancestors and the migrated populations, the scientists were able to trace their time of arrival at the Nicobar Islands

Andaman and Nicobar Islands

- Andaman and Nicobar Islands is the largest archipelago system in the Bay of Bengal. It extends over an area of 8249 Sq. km comprising 572 islands of which 37 are inhabited.
- The Andaman and the Nicobar Islands are separated by the Ten Degree Channel, which is around 150 km wide. Though they're close to each other, the peoples of the two islands have significantly different physical features, which also differ from those of the people of mainland India.
- The Island groups have been the home of aboriginal tribes, namely, the Great Andamanese, Jarawa, Onge & Sentineles, all of Negrito Origin in the Andaman group of Islands. The tribes in the Nicobar Islands are the Nicobarese and the Shompen.

Political Background of Nicobar

- Post Independence: The Government was keen to protect the interests of the Nicobarese and did not allow outside traders to exploit the people. The regulation for the Protection of Aboriginal Tribes came into force in 1956 under which entry to the Nicobar Islands was strictly restricted.
- In the late 1960s 330 ex-defence personnel were settled in some de-reserved areas of Great Nicobar island, where the Panchayat System exists at present. On 1st August, 1974, Nicobar group of islands was declared a separate district with its headquarters at Car Nicobar, where half of the population exists. Except three Panchayats and one Panchayat Samiti in Great Nicobar, the rest of the District has its own local traditional Tribal Councils.

27. Why are tribal women excluded from property rights?

(Use this content in the topic of syllabus – Unit 6.2 Paper II)

- Property ownership is not merely an economic question; it is fundamentally about power, dignity, and equality. For tribal women in India, exclusion from statutory inheritance rights has been one of the deepest forms of gender injustice.
- The Supreme Court's July 2025 judgment striking down customary exclusions in tribal property rights represents both a historic corrective and a challenge: how to reconcile tribal customs with constitutional equality. The debate is timely, following International Day of the World's Indigenous Peoples (August 9) and growing recognition of indigenous rights worldwide.
- In Ram Charan and Ors. vs Sukhram and Ors. The Supreme Court equated the exclusion of daughters from ancestral property in tribal communities with a violation of their fundamental right to equality. This is a landmark first, since earlier judgments such as Madhu Kishwar vs State of Bihar (1996) had refrained from striking down such customs.
- The judgment underscores the scale of injustice: as per the Agriculture Census 2015–16, only 16.7% of ST women own land compared to 83.3% of men. This ruling, therefore, marks a dramatic departure from precedent and could fundamentally reshape tribal women's access to property, inheritance, and dignity.
- Customary laws: Tribals in Scheduled Areas follow customary laws on marriage, succession, and adoption, which largely exclude women from land inheritance. Economic contributions ignored: Despite tribal women contributing more to farms than men, they

are legally excluded.

- Fear of land alienation: Communities argue that women marrying outside the tribe may lead to loss of tribal land to outsiders.

Why is codification or a new law necessary?

- Exclusion from Hindu Succession Act: Section 2(2) leaves tribal women outside its ambit. Proposal for Tribal Succession Act: A separate codified framework could balance equality with respect for indigenous identity. Precedent in Hindu & Christian laws: Their codification addressed similar issues of gender parity and succession, showing a workable model.
- Conclusion : The Supreme Court's July 2025 judgment marks a historic turning point in advancing gender justice for tribal women. Yet, lasting reform requires more than judicial intervention, it needs legislative codification, social sensitization, and integration of constitutional values into tribal governance frameworks. Recognizing tribal women as equal stakeholders in ancestral property is not just a matter of law, but of justice, dignity, and true nation-building

28. Enumeration of PVTGs and Population estimates

(Use this content in the topic of syllabus – Unit 9.1 Paper II)

- The Ministry of Tribal Affairs (MoTA) has written to the Registrar General and Census Commissioner of India (RGI) to enumerate PVTGs separately in Census 2027.
- Overview: Sub-category of Scheduled Tribes (STs) marked by stagnant or declining population, geographical isolation, pre-agrarian subsistence, economic backwardness, and very low literacy.
- Origin: Concept recommended by the Dhebar Commission (1960–61) noting inequalities among STs. Historical Evolution: Fourth Five-Year Plan (1969–74): creation of Primitive Tribal Groups (PTGs). Fifth Five-Year Plan (1974–79): 52 groups identified. 2006: PTGs renamed as PVTGs.
- Present Status: 75 PVTGs recognized across 18 states and 1 UT (Andaman & Nicobar Islands). Characteristics: Small numbers, remote habitation, pre-agricultural practices, hunting and gathering reliance, and in some cases zero or negative population growth.
- Enumeration and Population Estimates: 2011 Census Status: PVTGs were NOT separately enumerated, counted under the broader ST category. Special Cases: 2011 Census: Baigas counted separately, while Abujh Marias, Bharias, Hill Korbas, Kamars subsumed under STs. 2013: Abujh Maria and Hill Korba explicitly added to Chhattisgarh's ST list via legislation.
- Recent Estimates: 2023 PM JANMAN survey estimated the population at 47.5 lakh. Madhya Pradesh: 13.22 lakh (highest). Maharashtra: about 6.7 lakh. Andhra Pradesh: about 5.18 lakh. Largest and Smallest: Largest: Baiga of Madhya Pradesh with about 4.14 lakh. Smallest: Sentinelese of Andaman & Nicobar Islands with just 15 individuals.
- Micro Groups: In 2011, 13 PVTGs had populations below 1,000 including Jarawa, Onge, Sentinelese, Shompen (A&N Islands), Raji (Uttarakhand), Kota (Tamil Nadu), Birhor (Odisha/Bihar), Kamar (Madhya Pradesh), and others.