

THE PALA CIVIL TIMES



Civil Service Institute | Pala | Thiruvananthapuram | South India's Premier Civil Service Coaching Institute | www.civilservicepala.com

Initial findings point to Iron Age origins at new excavation site in T.N.



The Hindu: 13/10/2025- Page 2

Natural farming gains traction in Himachal



The Hindu: 13/10/2025- Page 6

A mere four mutations help the naked mole rat fix its DNA and live longer



The Hindu: 13/10/2025- Page 7

Canadian Foreign Minister set to meet Jaishankar today



The Hindu: 13/10/2025- Page 4

India sends Minister to Egypt for Gaza summit



The Hindu: 13/10/2025- Page 4

Afghanistan has options if peace efforts don't work: Muttaqi

Afghanistan is open to dialogue and diplomacy for a peaceful resolution of its conflict with Pakistan, but if the efforts do not succeed, it has "other means", said the acting Foreign Minister of the Taliban administration, Amir Khan Muttaqi in response to the border clashes between the two countries. The two countries have experienced periods of cooperation and hostility.



Pakistan carried out air strikes against targets in Kabul on Thursday, and in response, the Afghan Defence Forces conducted operations across the Durand Line in which 58 Pakistani soldiers were killed. Pakistan has been claiming that Tehreek-e-Taliban Pakistan (TTP) is drawing support from the Afghan Taliban administration and is using Afghan territory to launch attacks against it. Both countries accuse each other of harboring terrorists. Faced with multiple questions on the condition of women in Taliban-ruled Afghanistan, Mr. Muttaqi said, "Afghanistan has Islamic rule. In Islam, everyone's rights are protected, be it men or women. Everyone has rights. There is no restriction on anyone." Pakistan hosts millions of Afghan refugees, one of the largest refugee populations in the world. After the Taliban returned to power in 2021, Pakistan initially welcomed the change, expecting stability. However, attacks by the Tehreek-e-Taliban Pakistan (TTP) from Afghan soil have worsened ties. Pakistan and Afghanistan share deep historical and cultural ties, but their relationship is strained by border disputes, security concerns, and political mistrust.

The Andaman and Nicobar administration will soon launch a round-voyage cruise service from Port Blair to India's only active volcano at Barren Island



Email accounts of 12 lakh Central govt. employees migrated to Zoho
»page 3



WTI report highlights crucial role played by India's forest staff »page 4

STATE



Initial findings point to Iron Age origins at new excavation site in T.N.

Discovery and Site Details

- Initial excavations in Thirumalapuram, Tenkasi district, Tamil Nadu, by the Tamil Nadu State Department of Archaeology have uncovered Iron Age cultural evidence near the Western Ghats.
- The burial site spans around 35 acres, located 10 km northwest of the present-day village, between seasonal streams sourced from the Western Ghats.

Dating and Significance

- Tentative estimates indicate the site's origins could date to the early to mid-third millennium BCE, similar to Adichanallur and Sivagalai sites.
- Archaeologists believe the site belongs to the Iron Age, but further scientific analysis could confirm exact dating.

Excavation Finds

- This season's work uncovered 37 trenches and over 78 antiquities made of bone, gold, bronze, and iron.
- Noteworthy objects include a tweezers, sword, spearhead, axe, dagger, gold ring, chisel, bonehead, and arrowhead, along with ceramics and grave goods like urns and painted ware.
- A chamber with 35 stone slabs, filled with cobblestones, housed urn burials and urns—claimed as a first-of-its-kind discovery in Tamil Nadu.

Unique Elements and Symbolism

- Distinctive pottery types found include black-and-red ware, red ware, and black-polished ware, some featuring white-painted designs and symbols.
- One pot's designs depicted a human figure, mountain, deer, and tortoise.
- Three tiny gold rings (4.8 mm diameter, <1 mg weight each) were found in an urn at 0.49 meters depth.

Broader Implications

- The findings draw parallels to other major sites like Adichanallur and Sivagalai, dating back to between 3345 BCE and 2513 BCE.
- Comparisons suggest Thirumalapuram may also belong to the early to mid-third millennium BCE, shedding light on Iron Age presence in southern India.

Natural farming gains traction in Himachal

State Initiatives and Policy Support

- Himachal Pradesh farmers are increasingly adopting chemical-free agricultural practices due to supportive state policies and initiatives like the Prakritik Kheti Khushhal Kisan Yojana (PK3Y).
- The government supports natural farming by offering a minimum support price (MSP) for naturally grown crops such as maize, wheat, turmeric, and raw turmeric.

Impact on Farmers and Agriculture

- Farmers report improved soil and plant health along with higher yields and profits compared to chemical-based farming.
- Payment and procurement support from the government has made natural farming more economically viable; for example, naturally grown raw turmeric was procured at ₹90 per kg compared to ₹60 earlier.
- Natural farming has made farmers more self-reliant and reduced dependence on market inputs.

Training, Certification, and Spread

- Over 3.06 lakh farmers have received training under PK3Y in the past seven years, with 2.22 lakh practicing natural farming on 38,437 hectares.
- Certification through CETARA-NF ensures quality and standard practices are followed by natural farming practitioners.

Outcomes and Government Goals

- Natural and chemical-free crops are being promoted as healthier and more environmentally friendly.
- The Himachal government aims to make natural farming a model for both improved farmer welfare and environmental conservation.
- Chief Minister Sukhvinder Singh Sukhu emphasizes the dual benefits: less farmer health risk from chemicals and the production of nutritious, chemical-free crops.



Email accounts of 12 lakh Central govt. employees, including the PMO, have now migrated to Zoho

Migration and Scale

- Over the past year, all 12 lakh email accounts of Union government employees, including the Prime Minister's Office (PMO), have migrated from the National Informatics Centre (NIC) email system to a platform developed by Zoho, a company headquartered in Tamil Nadu.
- This move is part of a broader push to modernize and secure digital communications within the central government.

Purpose and Features

- The primary reason was to discourage the use of open-source apps for creating text files, spreadsheets, and presentations that could pose security risks.
- Zoho's suite offers integrated office productivity tools and is now incorporated into the official government mail system, making these applications directly available to all employees.

National Policy Alignment

- The migration aligns with India's vision of building a self-reliant ("Atmanirbhar") digital ecosystem, supporting home-grown technology and strengthening digital sovereignty.
- The suite's adoption is seen as a step in the "Swadeshi" movement to encourage domestic IT solutions and innovation.

Domain and Security

- While the email domains (nic.in or gov.in) remain the same, the backend data hosting and processing has shifted from NIC to Zoho.
- Robust security checks are in place: regular audits by government agencies, CERT-In, and SQS have ensured that data remains safe and secure on the new platform.

India sends Minister to Egypt for Gaza summit



Indian Representation and Reason

- India is sending Minister of State for External Affairs Kirti Vardhan Singh to represent the country at the Gaza Summit in Sharm el-Sheikh, Egypt, co-hosted by Egypt and the US.
- Prime Minister Narendra Modi was invited but declined due to short notice, with the invitation delivered by the Egyptian Ambassador in Delhi.

Summit Objectives and Participants

- The summit aims to discuss a ceasefire deal between Israel and Hamas, mediated mainly by negotiators from the US, Egypt, and Qatar.
- Over 20 world leaders are expected, including the UN Secretary-General and leaders from France, Italy, Spain, the UK, the EU, and the Gulf region; some Asian and other global leaders are also expected.

Diplomatic Context

- Egypt seeks broader international support by inviting alternative trade route partners, like India, to the summit.
- Mr. Modi will not attend but is expected to visit Egypt for the India-Middle East-Europe Economic Corridor (IMEC), indicating India's ongoing engagement in the region.

Related Developments

- U.S. President Donald Trump and Israeli Prime Minister Benjamin Netanyahu are involved in parallel developments, such as prisoner releases and address to the Israeli parliament.
- The summit is seen as a historic attempt to end the war on Gaza, secure regional stability, and advance a comprehensive peace agreement, as emphasized by Egypt's Foreign Ministry.

WTI report highlights crucial role played by India's forest protectors

- The Wildlife Trust of India (WTI) report, "Guardians of the wild: supporting India's frontline forest staff," highlights the critical role and challenges faced by India's forest rangers, known as Van Rakshaks.
- These forest protectors safeguard biodiversity across more than 1,100 protected areas and numerous other habitats, often facing life-threatening, round-the-clock duties such as patrolling, monitoring, crime fighting, and emergency response.
- The WTI's Van Rakshak Project (VRP), launched in 2000 with IFAW support, aims to build a motivated and equipped ranger workforce.

Afforestation and Plantation Work:

- They take part in tree planting, reforestation, and soil conservation programmes.

Forest Management:

- They manage forest resources in a sustainable way—balancing human needs with environmental protection.

Community Awareness:

- They educate local people about the importance of forests and involve them in conservation efforts.

Data Collection:

- They record information about forest cover, wildlife population, and resource use for government planning.

Challenges Faced by Forest Staff:

1. Lack of Manpower and Resources:
2. Many forest areas have too few staff and limited vehicles, weapons, or equipment.
3. Threats from Poachers and Smugglers:
4. They often face danger while tackling illegal logging and wildlife trafficking.
5. Difficult Working Conditions:
6. Forest staff work in remote, harsh, and sometimes dangerous environments.

Decks cleared for Maitri II, India set to chart new frontiers in Antarctica



- India's next chapter in the world's southernmost continent, Antarctica, is all set to unfold. The Finance Ministry has granted approval for Maitri II — the country's newest research station proposed to come up in eastern Antarctica.
- Once built and readied by January 2029, Maitri II will become India's fourth research base on the frozen continent.
- Goa-based National Centre for Polar and Ocean Research (NCPOR) under the Ministry of Earth Sciences (MoES) is the nodal agency responsible for operating and organising missions to Antarctica and the Arctic.
- The plan for Maitri II was first proposed in late 2023. The in-principle approval was granted on October 4 this year.
- India's first research base in Antarctica, Dakshin Gangotri, operated for a few years. Currently, Maitri, operational since 1989, and Bharati, operational since 2012, support India's scientific community in gathering data exclusive to the wilderness of Antarctica.
- As the world's fifth-largest continent, Antarctica offers unique wildlife and extreme weather — cold, dry, and windy — making it one of the most sought-after research destinations for unexplored terrains.
- The icy landmass holds nearly 75 percent of the earth's freshwater reserves.
- According to MoES, Maitri II will be larger than Maitri I, with plans to design it as a green research base. The proposal includes using renewable energy sources — solar power for summer expeditions and wind energy to harness the strong Antarctic winds — to run the station's operations. The new base will also feature upgraded infrastructure and living conditions, including improved toilets.

PRELIMS CORNER :

1. "Partnership for Global Infrastructure and Investment" (PGII) is an initiative to meet the infrastructure needs of low and middle-income countries that were launched by which of the following organizations/groups ?

- (a) World Bank
- (b) World Economic forum
- (c) G20
- (d) G7

2. Ujh Multipurpose Project is built on which of the following rivers ?

- (a) Chenab
- (b) Jhelum
- (c) Indus
- (d) Ravi

3. 'Ol Chiki' script, which has been in the news recently, is the official writing system for

- (a) Santhalis
- (b) Gonds
- (c) Soligas
- (d) Todas

4. Which Article of the Indian Constitution deals with the power of the President to summon a joint sitting of the houses to resolve the deadlock ?

- (a) Article 103
- (b) Article 108
- (c) Article 123
- (d) Article 143

DETAILED ANSWER KEY IN THE CIVIL SERVICE CHRONICLE PAGE

How a demand by rural labourers in Rajasthan led to landmark RTI Act: Back where it all started, a movement is remembered

- Marking 20 years since the Right to Information Act, 2005, came into effect, RTI activists from various parts of the country gathered in Rajasthan's Beawar on Sunday and celebrated the movement for greater transparency that led to the landmark legislation.
- It was held in Beawar, the cradle of the Right to Information movement that started with a 44-day protest here in April 1996. The city now has various monuments dedicated to the movement, and plans are underway to establish an RTI Museum.
- The demand for the RTI Act started with rural labourers asking to see the muster roll of the projects they were working on.
- The Right to Information (RTI) Act, 2005 is an important law in India that allows citizens to seek information from any public authority. It promotes transparency and accountability in the functioning of the government.

Implications of the RTI Act:

Positive Implications:

- **Promotes Transparency:**
- It helps uncover corruption and misuse of power in government offices.
- **Empowers Citizens:**
- People can question authorities and hold them accountable for their actions.
- **Improves Governance:**
- Government officials are more careful in decision-making since their actions are open to public scrutiny.
- **Encourages Participation:**
- Citizens become more involved in democracy and public administration.

Challenges and Negative Implications:

- **Misuse of the Act:**
- Some people file frivolous or repetitive RTI requests to harass officials.
- **Delay in Responses:**
- Many departments fail to respond within the given time due to lack of staff or resources.
- **Threats to Whistleblowers:**
- RTI activists sometimes face harassment or attacks for exposing corruption.
- **Lack of Awareness:**
- Many citizens, especially in rural areas, are still unaware of their right to information.

SCIENCE

A mere four mutations help the naked mole rat fix its DNA and live longer

The naked mole rat (*Heterocephalus glaber*) is a small, hairless rodent native to East Africa, and famous for living an astonishingly long time, up to around 37 years, nearly 10x longer than mammals of similar size. Scientists have long suspected its remarkable longevity comes from adaptations that keep its DNA intact. As we age, DNA damage accumulates in our cells. Normally, cells repair these breaks using several molecular pathways, but errors or inefficiencies in repair make genomes unstable and lead to ageing and disease.



- One molecule known to influence this process is cyclic GMP-AMP synthase (cGAS). In humans and mice, cGAS helps detect foreign DNA, such as that from viruses, and triggers immune responses.
- It also suppresses one of the body's main DNA-repair systems, called homologous recombination—as a result, human cGAS can actually make cells more prone to ageing and cancer.
- In the naked mole rat, evolution essentially flipped the role of cGAS, supporting the idea that efficient DNA repair is one of the main defences against ageing.
- Scientists used genetic engineering tools to switch specific amino acids — the building blocks of proteins — between species and observe the effects on DNA repair.
- They also performed experiments in cell cultures, fruit flies, and mice to test how these molecular changes affected genome stability, cellular ageing, and lifespan.
- The reason lay in four amino acid substitutions in cGAS's structure, which allowed naked mole rat cGAS to remain bound to DNA for longer after damage occurred instead of being quickly removed.
- This binding prevented cGAS from being tagged for destruction by a process called ubiquitination.
- Instead, naked mole rat cGAS brought together two repair proteins, called FANCI and RAD50, to speed up homologous recombination and help fix DNA breaks more efficiently.
- Cells with this modified cGAS showed fewer signs of stress-induced aging.
- When the scientists put the same four amino acid changes into human cGAS, the molecule stopped harming DNA repair.
- The discovery is remarkable for showing that longevity can evolve not only by improving helpful repair enzymes but also by weakening harmful regulators.
- Independent experts have said that if scientists can safely reproduce this effect in other species, including humans, it could open new paths for age-related research and therapies.
- For example, medicines that adjust how cGAS interacts with DNA might help cells maintain genome integrity without compromising the immune system.

Canadian Foreign Minister set to meet Jaishankar today

1. Historical Background

- Diplomatic relations between India and Canada were established in 1947, soon after India's independence.
- Both countries are Commonwealth nations and share democratic traditions, multicultural societies, and strong people-to-people connections.
- Canada has a large Indian diaspora (over 1.4 million people), one of the largest Indian-origin communities outside India, which plays an important role in strengthening cultural and economic ties.

2. Political Relations

- The two nations have generally maintained friendly relations, though they have occasionally faced strains.
- In the 1970s, relations were affected when India conducted nuclear tests in 1974, and Canada suspended nuclear cooperation, accusing India of using Canadian nuclear technology for weapons.
- Ties improved after the 1990s, with several high-level visits and renewed cooperation.
- Recently, political relations have become tense due to Canada's comments on internal issues of India and concerns about pro-Khalistan extremist activities in Canada.

3. Economic and Trade Relations

- Trade: Bilateral trade between India and Canada is worth around USD 8–10 billion annually.
- India exports textiles, gems, pharmaceuticals, and machinery.
- Canada exports pulses, fertilizers, minerals, and timber.
- Investment: Canada's pension funds and companies have invested heavily in India's infrastructure, renewable energy, and technology sectors.
- The two countries have been negotiating a Comprehensive Economic Partnership Agreement (CEPA) and an Early Progress Trade Agreement (EPTA) to strengthen trade ties.

4. Educational and Cultural Relations

- Canada is a major destination for Indian students—over 300,000 Indian students study there, forming the largest group of international students.
- Cultural cooperation is strong through events, tourism, and exchange programmes.
- Bollywood and Indian cuisine have become very popular in Canada, symbolizing close cultural interaction.

5. Strategic and Security Cooperation

- Both countries cooperate on issues like counterterrorism, climate change, renewable energy, and peacekeeping.
- Canada supports India's participation in global organizations such as the UN Security Council and the Nuclear Suppliers Group (NSG), though progress has been limited.
- Defense cooperation is modest but growing, focusing on training and technology sharing.

6. Areas of Friction and Challenges

- **Khalistan Issue:**
- India has expressed concern about the activities of Khalistani separatist groups operating in Canada.
- This issue has caused major diplomatic tension, especially after Canada's allegations regarding India's role in the killing of a Khalistani activist in 2023, which India strongly denied.
- **Political Differences:**
- Canada's domestic politics, especially where politicians rely on Sikh diaspora votes, sometimes affect its approach towards India.
- **Limited Strategic Trust:**
- Despite economic ties, mutual trust on security and political matters remains low.

7. Recent Developments

- Relations worsened in 2023–2024 following diplomatic disputes over the Khalistan issue, leading to suspension of visa services and expulsion of diplomats on both sides.
- Trade negotiations were also paused temporarily.
- However, both nations have expressed the desire to normalize relations and continue cooperation in trade and education.

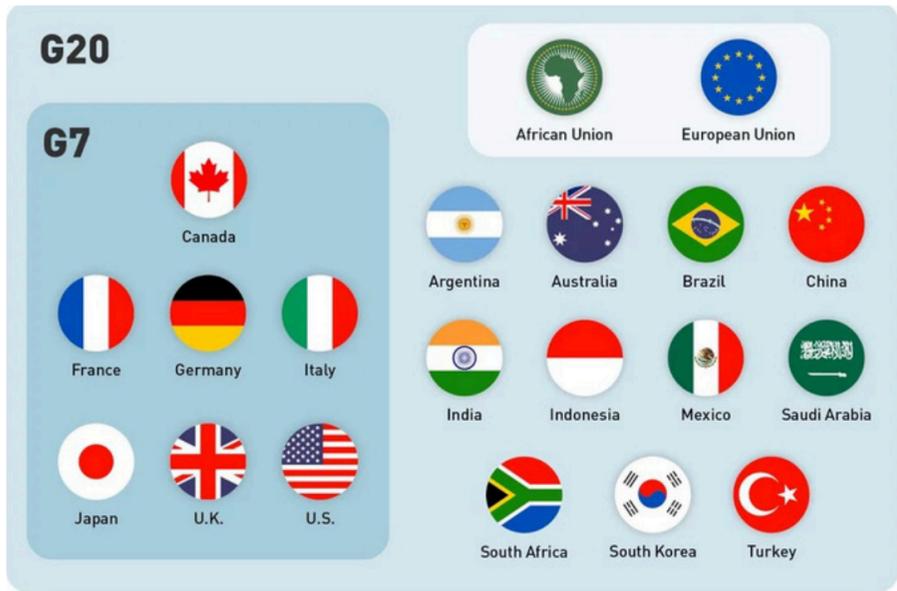
8. Overall Significance

- India and Canada have great potential for collaboration in clean energy, technology, education, and trade.
- Strong people-to-people ties act as a stabilizing factor even during political disagreements.

Prelims Corner: Explanations

Q1. Ans d

The Group of Seven (G7) countries launched a new programme called Partnership for Global Infrastructure and Investment (PGII) to meet the financial and technical needs for building quality infrastructure in low and middle-income countries to end the dominance of China's Belt and Road Initiative (BRI).



Q2. Ans d

The Ujh project is a multipurpose (Hydropower, Irrigation and Drinking) River valley scheme in Jammu and Kashmir State. The proposed project is on the River Ujh, which is one of the main tributary of River Ravi. The Ujh Multipurpose Project after completion has the irrigation potential of 91,073 hectare, with a power generation capacity of 89.50 MW.



Q3. Ans a

Ol Chiki script is the official writing system of the Santali language, a very important language in India. It is invented by Pandit Raghunath Murmu in the year 1925 is the official writing system for Santali. In Eastern India, a vast community in Jharkhand, West Bengal, Odisha, Assam, and other Northeastern states speak and write in Santhali.



Q4. Ans b

Article 108 of the Indian Constitution provides for joint sittings of both Houses. The President summons a joint session of Parliament, which is presided over by the Speaker or, in his absence, the Deputy Speaker of the Lok Sabha or, in his absence, the Deputy-Chairman of the Rajya Sabha. The quorum for a joint session shall be one-tenth of the total number of House members. It must be noted here that the provision of joint sitting applies to ordinary bills or financial bills only and not to money bills or Constitutional amendment bills.



Case Study:



Chinar Trees in Kashmir Now Wear QR-Aadhaar Tags to Track Their Survival.

The towering chinars, once vulnerable to illegal felling, are now under the digital watch of the administration, marking a new era of conservation – one that leaves no room for tampering. Chinar trees are the heritage of the Kashmir valley. Rapid cutting has reduced their numbers drastically. By geo-tagging each tree, the administration monitors their health, ensuring their protection and preservation for future generations. This initiative aims to safeguard chinar trees from the threats of urbanisation and deforestation. As part of the project, around 10,000 chinars have been geo-tagged as of now. Chinar trees, renowned for their longevity and majestic, spreading crowns, offer shade in summer and a breathtaking spectacle in autumn. Data suggests a dramatic reduction, from 42,000 trees in 1970 to between 17,000 and 34,000, today. This loss is evident even in celebrated locations like Srinagar's Shalimar Garden, a Mughal-era masterpiece famed for its vibrant fall foliage. Environmentalists also attribute this crisis in part to climate change. The Himalayas' fragile ecosystem is highly susceptible to shifting weather patterns.

OCT
13



International Day for Disaster Risk Reduction

It is a day to promote a global culture of risk-awareness and disaster reduction. Globally, countries face increasingly severe natural events, driven by extreme weather and risk-blind planning. While direct disaster costs reach around \$202 billion annually, the broader economic impact is estimated at \$2.3 trillion. Despite this, investment in disaster risk reduction (DRR) remains minimal.



For years, researchers have puzzled over how the ancient people of Rapa Nui did the seemingly impossible and moved their iconic moai statues. Using a combination of physics, 3D modeling and on-the-ground experiments, a team including faculty at Binghamton University, State University of New York, has confirmed that the statues actually walked – with a little rope and remarkably few people in a zig-zag motion along carefully designed roads. Easter Island, a Chilean territory, is a remote volcanic island in Polynesia. Its native name is Rapa Nui.