

October - 22

TNPSC BITS

- ❖ Ahmedabad has been recommended as the host city for the 2030 Centenary Commonwealth Games by the Commonwealth Sport's Executive Board.
- ❖ Trans rights activist Akkai Padmashali has been named as a member of a Supreme Court-appointed committee to formulate an equal opportunity policy for the protection of the rights of transgender persons.
 - She becomes the first transgender person from Karnataka to be part of a panel appointed by the apex court.
- ❖ The World Spine Day 2025 is observed annually on October 16 to raise awareness about spinal health and related disorders.
 - The theme for 2025 is "Invest in Your Spine."

TAMIL NADU NEWS

SLAS 2025 report



மாநில அளவிலான சாதனை கணக்கெடுப்பு அறிக்கை (SLAS - 2025)

மாண்புமிகு தமிழ்நாடு முதலமைச்சர் திரு. மு.க.ஸ்டாலின் அவர்களை

மாநில திட்டக் குழுவின் செயல் துணைத் தலைவர் பேராசிரியர் ஜெ. ஜெயரஞ்சன் அவர்கள் சந்தித்து, மாநில அளவிலான சாதனை கணக்கெடுப்பு அறிக்கையினை (SLAS - 2025) (மாண்புமிகு பள்ளிக் கல்வித் துறை அமைச்சரின் மாவட்ட வாரியான மதிப்பாய்வுக் கூட்ட அறிக்கை) வழங்கினார்.

- ❖ The State Level Achievement Survey (SLAS) 2025 assessed learning outcomes of 980,340 students from Classes 3, 5, and 8 across 45,924 government and government-aided schools.

- ❖ The survey focused on key subjects, including Tamil, English, Mathematics, Environmental Studies, Science, and Social Science, using Bloom's taxonomy for assessment design.
- ❖ Class 3 state average scores were Tamil 67%, English 69%, Mathematics 54%, and Environmental Studies 76%.
- ❖ Class 5 state average scores were Tamil 76%, English 51%, Mathematics 57%, and Environmental Studies 57%.
- ❖ Class 8 state average scores showed a decline with Tamil 52%, English 39%, Mathematics 38%, Science 37%, and Social Science 54%.
- ❖ District-wise analysis revealed 22 districts performed above state averages, while 15 districts performed below in all subjects.
- ❖ Madurai district ranked third overall in the State Level Achievement Survey (SLAS) 2025 among government and aided schools in Tamil Nadu.
- ❖ Other top-performing districts in Tamil Nadu included Kanyakumari, Tenkasi, and Sivagangai, with Kanyakumari leading the state overall at 66.5%.

NATIONAL NEWS

Cough Syrup Drug Safety



- ❖ At least 22 children died in October 2025 after consuming Coldrif cough syrup, which contained 45% diethylene glycol (DEG), a toxic industrial solvent.
- ❖ The syrup was manufactured in Tamil Nadu and distributed in several districts of Madhya Pradesh.
- ❖ Similar tragedies occurred in 2022, when contaminated Indian syrups caused child deaths in The Gambia and Uzbekistan.

- ❖ India's dual drug regulation system involves both the Central Drugs Standard Control Organisation (CDSCO) and state drug controllers.

New EPF Rules 2025

The Central Board of Trustees (CBT), EPF, has approved simplified and liberalized partial withdrawal provisions for members.

- ◆ 13 complex rules merged into 3 easy categories Essential Needs, Housing Needs & Special Circumstances
- ◆ Uniform 12-month service requirement for all withdrawals
- ◆ Zero documentation and 100% auto claim settlement

A major
step towards
member convenience
and financial
empowerment!

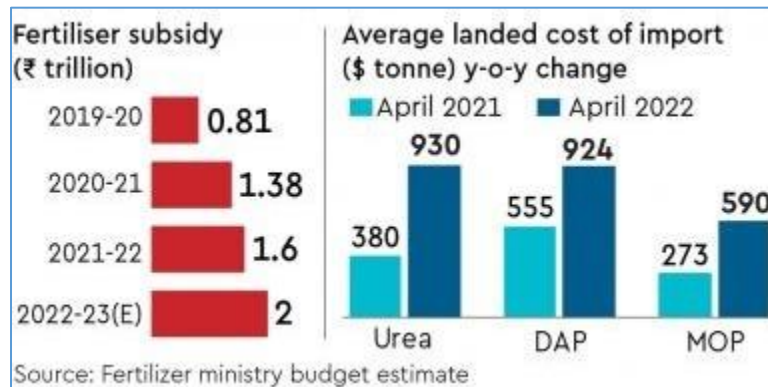


- ❖ Employees' Provident Fund Organisation (EPFO) now allows 75 % of the Employees' Provident Fund (EPF) amount to be withdrawn immediately after job loss.
- ❖ The remaining 25 % of the EPF amount can be withdrawn after one year from the date of unemployment.
- ❖ The new rules ensure that the employee's 10-year service record is not broken and pension eligibility is maintained.
- ❖ The withdrawal window has been extended from two months to one year after job loss.
- ❖ Life certificate verification for elderly and remote members will now be done at home through postal services.

India's Fertiliser Imbalance

- ❖ Fertiliser subsidies in India remain highly skewed towards nitrogen or urea.
- ❖ The overuse of urea due to lower cost compared to phosphorus and potassium is causing nutrient imbalance and stagnant crop yields.

- ❖ India is increasingly dependent on imports for pulses and oilseeds due to lower agricultural productivity.
- ❖ Urea accounts for nearly 70 % of the total fertiliser subsidy bill, with farmers accessing it at subsidised rates through digital outlets.
- ❖ Five new urea plants in Uttar Pradesh, Telangana, Odisha, Bihar and Jharkhand are expected to produce 6.5 million tonnes annually to cut imports.
- ❖ Around 43 % of Indian soils are deficient in zinc, and nearly 18 % lack boron, worsening soil health and crop output.



ECONOMY NEWS

UPI payments in Japan



Indian travellers visiting Japan may soon pay just like home — via UPI! 🇯🇵 ✨

NPCI International has signed an **MoU** with **NTT DATA Japan**, operator of Japan's largest payment network **CAFIS®**, to enable **UPI payments** across Japanese merchants.

- ❖ The new NPCI- NTT partnership aims to simplify digital payments for Indian travellers and support Japanese merchants with increased payment options.

- ❖ Indian tourists now can pay at NTT Data-managed merchant locations in Japan by scanning QR codes using their UPI apps.
- ❖ NTT Data operates CAFIS (Credit and Finance Information Switching system), Japan's largest card payment processing network.
- ❖ Countries where UPI is currently accepted include Bhutan, France, Mauritius, Nepal, Singapore, Sri Lanka, the United Arab Emirates, and Qatar.

SCIENCE AND TECHNOLOGY NEWS

Astra Mark 2

- ❖ Astra Mark 2 is a Beyond Visual Range (BVR) air-to-air missile being developed by DRDO.
- ❖ It is an upgraded version of Astra Mark 1.
- ❖ Astra Mark 1 is already in service with the Indian Air Force and integrated with LCA Tejas and Su-30 MKI.
- ❖ Mark 2 will have a strike range of 150 to 180 km, with aiming to extend it beyond 200 km.
- ❖ It travels at speeds up to Mach 4.5 and features an indigenous Radio Frequency (RF) seeker from Su-30 MKI integration.



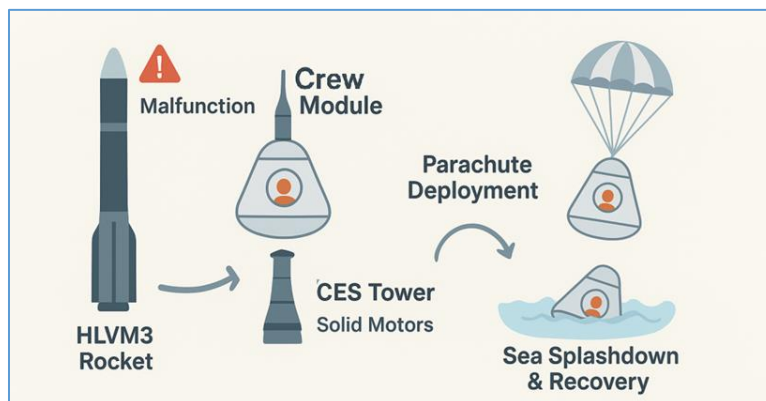
Military Combat Parachute System

- ❖ The Military Combat Parachute System (MCPS) of DRDO, was successfully tested at 32,000 feet by Indian Air Force.

- ❖ MCPS is the only parachute system in operational use by the Indian Armed Forces that can be deployed above 25,000 feet altitude.
- ❖ It features enhanced tactical capabilities such as lower descent rate, superior steering, and accurate navigation using Navigation with Indian Constellation (NavIC).



Gaganyaan's Emergency Exit Strategy

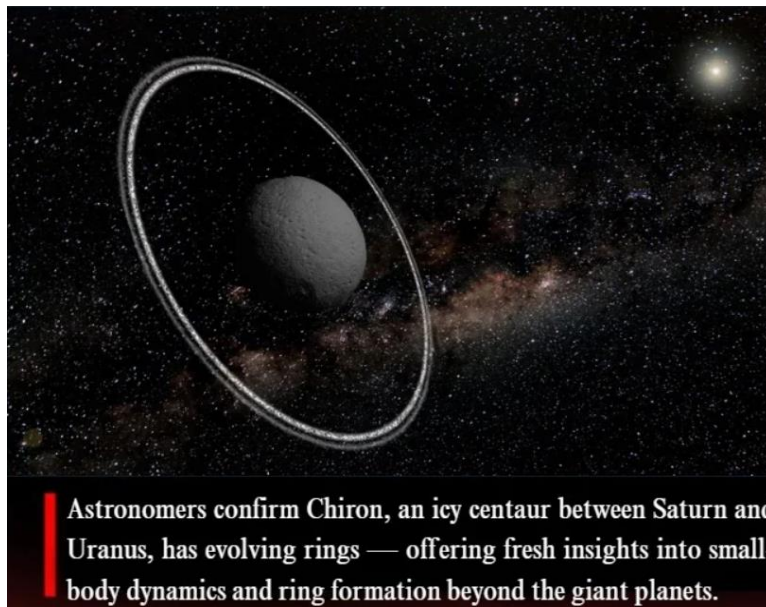


- ❖ Gaganyaan will use a Crew Escape System (CES) to safely eject astronauts during a launch emergency in the atmospheric phase.
- ❖ CES is a puller-type system placed at the top of the rocket, using fast-burning solid motors to pull the crew module away from a failing launch vehicle.
- ❖ It can generate acceleration up to 10 times gravity to outpace the rocket, ensuring the module reaches a safe distance quickly.

- ❖ After separation, a multistage parachute system slows the crew module for safe splashdown in the sea.
- ❖ An onboard Integrated Vehicle Health Management (IVHM) system monitors the mission and activates CES during critical failures.

Chiron's Evolving Ring System

- ❖ Astronomers have observed a developing ring system around Chiron, an icy centaur located between Saturn and Uranus.
- ❖ Four distinct rings were identified, with the inner rings located at approximately 273 km, 325 km, and 438 km from Chiron's centre.
- ❖ A fourth, outer ring was detected at around 1,400 km and is undergoing further observation to confirm stability.
- ❖ Chiron's rings appear to be made of water, ice and minor rocky material, possibly formed from past collisions or moon debris.
- ❖ Chiron joins three other small solar system bodies with rings: Chariklo, Haumea, and Quaoar.



ENVIRONMENT NEWS

Impatiens rajibiana

- ❖ A new balsam flower species- *Impatiens rajibiana* is discovered in Shergaon, West Kameng district, Arunachal Pradesh.

- ❖ It is endemic to the Shergaon region.
- ❖ The plant belongs to the Impatiens genus, known for bright flowers and explosive seed dispersal mechanisms.
- ❖ India has around 230 balsam species, including both native and ornamental types like Impatiens balsamina.
- ❖ Earlier discoveries from Arunachal Pradesh include *Impatiens godfreyi* and *Impatiens sashinborthakurii*.



Biodiversity Loss in Indian Parks – IUCN



- ❖ The IUCN has categorized the Western Ghats, Manas National Park in Assam, and Sundarbans National Park in West Bengal as sites of “significant concern.”



- ❖ These parks are transboundary areas, extending into Bhutan and Bangladesh, respectively.
- ❖ Sikkim's Khangchendzonga National Park is the only Indian site rated as "good" among 11 Asian protected areas.
- ❖ The IUCN World Heritage Outlook 4 report shows 30% of Asia's natural World Heritage sites face significant conservation concerns.
- ❖ Climate change is now the leading threat to these sites, followed by tourism and invasive alien species.
- ❖ Roads, railways, and human activities like logging and habitat clearance are major causes of biodiversity loss within protected areas.

REPORTS AND INDICES

WDMMA 2025 Rankings

- ❖ The United States Air Force (USAF) remains at the top in the latest World Directory of Modern Military Aircraft (WDMMA) data.
- ❖ It is followed by Russia in second place.
- ❖ India has overtaken China to claim the position of the third most powerful air force worldwide
- ❖ China is ranked fourth, followed by Japan, Israel, France, the UK, South Korea, and Italy.



STATES' NEWS

Naying Hydroelectric Project

- ❖ The Naying Hydroelectric Project is a proposed 1,000-megawatt (MW) power plant on the Siyom (Yomgo) river in Arunachal Pradesh.

- ❖ Its Commissioning is planned for 2032.
- ❖ It is projected to generate 4,966.77 gigawatt-hours (GWh) of electricity annually.
- ❖ The Siyom River is a 170 km long right-bank tributary of the Brahmaputra River, flowing through Arunachal Pradesh.
- ❖ Mouling National Park lies on the eastern bank of the Siyom River near the project location.



Uttar Pradesh's religious conversion Act



- ❖ The Supreme Court quashed several FIRs registered at Fatehpur district of Uttar Pradesh over alleged offence of "mass religious conversions" of Hindus into Christianity.

- ❖ The FIRs were filed under Uttar Pradesh Prohibition of Unlawful Conversion of Religion Act, 2021.
- ❖ As per the UP Act, as it stood then, only victims (or their relatives) could have lodged an FIR.
- ❖ The SC held that, the criminal law cannot be allowed to be made a tool of harassment of innocent persons.

DhaRti BioNest Incubation Centre

- ❖ The DhaRti BioNest Incubation Centre will be inaugurated at the IIT Dharwad, Karnataka.
- ❖ This centre aims to bridge the gap between academic research and industry-driven technological solutions.
- ❖ It has already supported 15 start-ups through the Elevate Karnataka scheme with seed funding of ₹50 lakh each.
- ❖ The initiative is part of the BioNest programme by the Biotechnology Industry Research Assistance Council (BIRAC).
- ❖ This incubation facility will promote innovation and research-based entrepreneurship in the region.



SPORTS NEWS

International Assists Chart

- ❖ Lionel Messi has set a new record with 60 assists in men's international football after Argentina's 6–0 win over Puerto Rico in October 2025.

- ❖ Messi's first international assist came in 2006 during Argentina's 6–0 win over Serbia and Montenegro at the FIFA World Cup.
- ❖ Nineteen years later, he broke the assist record in another 6–0 win, marking a historic career milestone.
- ❖ Current top assist makers in men's international football: Messi (60), Neymar (58), Donovan (58), Puskás (53), De Bruyne (52).
- ❖ The 38 years old Messi is now just two assists away from reaching 400 assists in his overall professional career.



MISCELLANEOUS NEWS

Arabian Sea Mini Warm Pool

- ❖ The Arabian Sea Mini Warm Pool forms every April–May near the Kerala coast with sea surface temperatures above 30°C.
- ❖ This warm pool triggers local convection and helps attract south westerly monsoon winds toward the Indian subcontinent.
- ❖ El Niño events delay the Indian Summer Monsoon by disrupting wind patterns in the Pacific and Indian Oceans.

- ❖ The Indian Ocean Capacitor Effect causes a delayed warming response in the Indian Ocean 4–5 months after El Niño.
- ❖ Easterly winds reduce surface cooling, intensifying the Mini Warm Pool in the southeastern Arabian Sea.
- ❖ A stronger warm pool generates low pressure that pulls moist winds toward Kerala, supporting a timely monsoon onset.
- ❖ In 2010, despite a strong El Niño, the monsoon arrived early due to this warm pool, as shown by IIT Delhi simulations.

