



November - 02

TNPSC BITS

- ❖ 'Abhay' the seventh Anti-Submarine Warfare Shallow Water Craft (ASW SWC) was recently launched at Kattupalli, near Chennai.
- Custodians of herbal traditional knowledge from Jammu & Kashmir and Gujarat were granted herbal patents.
- ❖ India achieved a commendable runner-up position in the overall team standings at the Asian Arm-Wrestling Cup 2024 in Mumbai.
- ❖ The Spanish soccer Rodri and Aitana Bonmati have won the men's and women's Ballon d'Or awards as the world's best footballers.
- * Ravi Shankar has received Fiji's highest civilian award, the "Honourary Officer of the Order of Fiji" for his global work in fostering peace and unity through The Art of Living Foundation.
- ❖ Zydus Lifesciences Ltd has received in-principal acceptability from the WHO for its Typhoid Vi conjugate vaccine, ZyVac TCV.
- The Prime Minister has launched classical musician Bharat Balvalli's biography, 'Bharatvakya.'
- ❖ A book titled "Mountain Mammals of the World" has been authored By M.K. Ranjitsinh.
- ❖ The 75th International Astronautical Congress (IAC) was held in Milan, Italy.
 - o The theme of the event is "Responsible Space for Sustainability".

TAMIL NADU

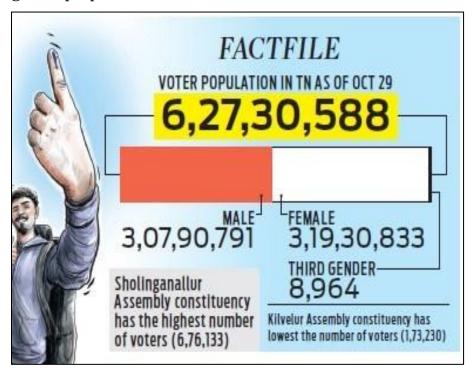
Tamil Nadu electorate 2024

- ❖ The electorate of Tamil Nadu grew by about four lakh voters and stood at 6.27 crore.
- ❖ Women continue to outnumber men in the electoral rolls by over 11 lakhs.
- ❖ As many as 8,964 voters are transgender people.
- ❖ The highest electorate in the State is in the Sholinganallur Assembly constituency in Chengalpattu district.
- ❖ It has 6,76,133 voters, including 3,38,183 men, 3,37,825 women, and 125 transgender people.
- ❖ The Kilvelur Assembly constituency in Nagapattinam district has the lowest electorate in the State.





❖ This has 1,73,230 voters, including 88,162 women, 85,065 men, and three transgender people.



Paadham Paadhukappom Thittam



❖ The Tamilnadu State government has issued a G.O to start the Paadham Paadhukappom Thittam for diabetes patients.





- ❖ This scheme aims to facilitate early identification of diabetic foot and prevent amputation.
- ❖ This facility will be available soon in 2336 Primary Health centres, 299 govt hospitals and 36 govt medical college hospitals.

NATIONAL

BRIC-NABI



- ❖ India's first Biomanufacturing Institute, the BRIC-National Agri-Food Bio-Manufacturing Institute (BRIC-NABI), was recently inaugurated at Mohali, Punjab.
- ❖ It is marking a pivotal step in the country's push for tech-driven agricultural transformation.
- ❖ This institute aims to harness biotechnology to create sustainable, high-tech solutions within the agri-food sector.

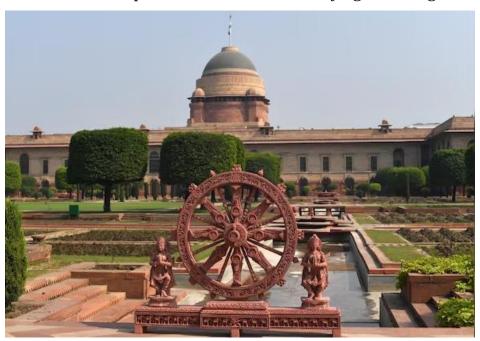
Konark Wheels at Amrit Udyan

- ❖ The Four sandstone replicas of the Konark wheel have been installed at the Rashtrapati Bhavan Cultural Centre and the Amrit Udyan.
- ❖ The Konark Sun Temple, a UNESCO World Heritage Site, is the culmination of Odisha temple architecture.





❖ It was built in the shape of a colossal chariot carrying the Sun god.



Biological diversity rules 2024

The Biological Diversity (Amendment) Bill, 2023, is a piece of legislation aimed at amending the existing Biological Diversity Act of 2002. It seeks to simplify processes, promote the cultivation of medicinal plants, share benefits from biodiversity commerce with local communities, and decriminalize biodiversity offenses. Additionally, it aims to create a favorable environment for research, investment, and patent applications related to biodiversity.

❖ The Centre has notified the Biological Diversity Rules to implement the 2023 amended law.





- ❖ This law facilitates the fast-tracking of research, encourages Indian system of medicine, brings more foreign investments in the chain of biological resources, and exempts registered Ayush medical practitioners.
- The rules give details on
 - How the National Biodiversity Authority (NBA) would provide technical and legal advice
 - Clarifications and guidance to the State Biodiversity Boards or UT Biodiversity
 Councils for implementing the provisions of the Act, and
 - o Administer the National Biodiversity Fund.
- ❖ The Rules also outline the procedure for registration and obtaining prior approval from the Authority before grant of IPR over research outcome.

INTERNATIONAL

Brazil's exit - Belt and Road Initiative



- Brazil has decided to opt out of China's Belt and Road Initiative (BRI).
- ❖ Thus, it becomes the second country after India in BRICS not to support the multi-billion-dollar project.
- ❖ India has also protested against the \$60 billion China-Pakistan Economic Corridor (CPEC).





❖ It is a flagship BRI project that runs through Pakistan-occupied Kashmir, arguing it violates its sovereignty.

Salt Typhoon



- ❖ The Chinese hackers have targeted the communication devices of US presidential candidates.
- ❖ This sophisticated hacking attempt was reportedly orchestrated by a Chinese cyber espionage group known as 'Salt Typhoon'.
- ❖ Salt Typhoon, the designation coined by Microsoft's cybersecurity team, is a group of state-sponsored Chinese hackers.

SCIENCE AND TECHNOLOGY

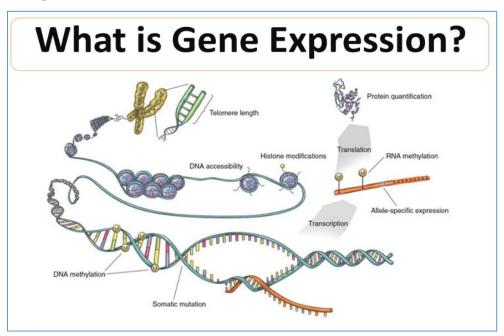
New Spatial Grammar of Gene Expression

- ❖ Transcription factors are special proteins that help read the information in our DNA.
- ❖ They attach to the specific regions of the DNA and start a process called the transcription, which copies genetic information from DNA to RNA.





- ❖ New research found that the fate of a gene being transcribed depends on the location of the transcription factor binding site relative to the location where transcription begins.
- ❖ This provides insights into how different spatial arrangements of the same transcription factors can have different effects.
- ❖ The findings can "help filter and refine genomic tools and algorithms that predict gene expression".



ENVIRONMENT

WMO Greenhouse Gas Bulletin

- ❖ Greenhouse gas levels surged to a new record in 2023, rising by more than 10% in just two decades.
- ❖ The globally averaged surface concentration of carbon dioxide reached 420 parts per million (ppm).
- ❖ Methane reached1934 parts per billion and nitrous oxide 336.9 parts per billion (ppb) in 2023.
- ❖ These values are 151%, 265% and 125% of pre-industrial (before 1750) levels.
- ❖ The 2023 increase of CO₂ in the atmosphere was higher than that of 2022.
- ❖ The annual increase of 2.3 ppm marked the 12th consecutive year with an increase greater than 2 ppm.





❖ In the last 20 years, the CO2 level has increased by 11.4% (42.9 ppm) above the level of 377.1 ppm recorded in 2004.

	CO ₂	CH ₄	N ₂ O
2023 global mean abundance	420.0±0.1 ppm	1934±2 ppb	336.9±0.1 ppb
2023 abundance relative to 1750°	151%	265%	125%
2022–23 absolute increase	2.3 ppm	11 ppb	1.1 ppb
2022–23 relative increase	0.55%	0.57%	0.33%
Mean annual absolute increase over the past 10 years	2.4 ppm yr ⁻¹	10.7 ppb yr-1	1.07 ppb yr ⁻¹

Rare Indian Skimmers



❖ At the Lower Manair Dam, around 150 to 200 rare Indian Skimmer birds were spotted, marking a first for Telangana.





- ❖ Typically, these birds migrate to Kakinada port in Andhra Pradesh during the winter.
- IUCN lists these birds as endangered.

STATES

Andhra Pradesh - Boost Childbirth Rates

State	Total fertility rate (TFR)	
Tamil Nadu	1.4	
West Bengal	1.4	
Delhi	1.4	
Telangana	1.5	
Punjab	1.5	
Maharashtra	1.5	N A
Kerala	1.5	
Jammu & Kashmir	1.5	
Karnataka	1.6	

- ❖ Andhra Pradesh has announced plans to create a law encouraging residents to have more children.
- ❖ It highlighted a population deficit, stating that fewer than two children per family leads to a rapid decline in the young population.
- ❖ Some concerns have arisen in the Southern states about reduced parliamentary representation due to lower fertility rates.
- ❖ The percentage of individuals aged 60 and above is expected to rise, particularly in Southern states.
- ❖ They transitioned to lower fertility rates earlier than their Northern counterparts.
- Uttar Pradesh is projected to reach replacement-level fertility only next year, over 20 years after Andhra Pradesh.





- ❖ Between 2011 and 2036 the population will increase by 31.1 crore, with Southern states contributing only 2.9 crore to this growth.
- * Recently Andhra Pradesh junked the rule that barred people with more than two children from contesting local body polls.

PERSONALITIES, AWARDS, AND EVENTS

KS Puttaswamy



- ❖ Justice K S Puttaswamy, the former Karnataka High Court judge and the lead petitioner in the seminal 'right to privacy case', passed away at Bengaluru.
- ❖ After retirement in 1986, he was appointed as the first Vice-Chairman of the Bengaluru bench of the Central Administrative Tribunal.
- ❖ He had also served as the chairperson of the Andhra Pradesh backward Classes Commission.
- ❖ In 2012, at the age of 86, Justice Puttaswamy would be one of the first litigants to challenge the Aadhaar scheme.
- ❖ This had led to a historic decision in August 2017 where a nine-judge bench unanimously recognised the fundamental right to privacy in the case of Justice K S Puttaswamy (Retd.) v. Union of India.

IMPORTANT DAYS

Vigilance Awareness Week 2024 - October 28 to November 03

❖ It focusses on building awareness and re-affirming the commitment of everyone to uphold integrity in public governance.





- ❖ The idea of this Week observation was first introduced in 2000.
- ❖ The theme for 2024 is "Culture of Integrity for Nation's Prosperity".



