



August - 01

TNPSC BITS

- ✤ The water level in Mettur dam reached 100 feet for the 71st time since its inauguration in 1934.
- ♦ Meta unveiled its biggest and the "best open-source model yet," the Llama 3.1.
- ✤ 1955 batch Veteran civil servant P.N. Veda Narayanan passed away recently.
- Manu Bhaker opened India's medal count at the Paris 2024 Games by winning a bronze medal in the women's 10m air pistol event.
- India's Kush Maini achieved a milestone by winning his first Formula 2 Sprint Race at the Hungarian Grand Prix.
- The Indian Institute of Spices Research (IISR) has received the best technology award for its pioneering work in the field of horticultural sciences.
- OpenAI has launched GPT-40 mini, which according to them is their most costefficient small model.
- OpenAI launched a prototype of its search engine, called SearchGPT, to give users "fast and timely answers with clear and relevant sources."
- Sri Lanka secured their first Women's Asia Cup cricket title win by beating India.
 - Earlier in 2018, Bangladesh beat India by three wickets.

TAMIL NADU



Tamil Nadu's own Stonehenge

An ancient observatory is found at the State's first astro-archaeological site in Ellanthankarai, Sivagangai.





- The huge burial site dating back to the megalithic period.
- This is the first astro-archaeological site in Tamil Nadu that reveals a clear observatory ground.
- This would then lead to a highly learned group called Tamil Arivargal who resided in the region.
- ✤ The earliest mention of these people is in the Tholkaappiyam.
- ✤ These people were well versed in astronomy.
- They would disseminate what they learnt to others and this form of learning was called Ainthiram, is also found in The Tholkaappiyam.

Luxury car registration in Tamilnadu

Registration value is over cars in 2022-2 orands saw a	of motor ₹30 lakh 23 to 8,4 19.3% ji the top fi	cars fo grew 75 cars ump in ive zon	e choic or which the sa 46.2%, from 5, in 2023-24. Lu registration ir ses for registrat	ale 797 Jxury 1 2023-										
Zone	Aston Martin	Aud	i Lamborghi	ni Bentl	ey BN	1W Ferrari	Jaguar Lar Rover	d Maserat	i Merced - Benz		0.642.00	Rolls - Royce	Grand Total	
Chennai	1	34	5	7	73	15 1	144	3	706	4	8	4	1,668	
Coimbatore		21	1		22	28	37		203	2	0		510	
Madurai		2			6	1	9		35	1	3		110	
Tirunelveli		6			3	4	6		45		4		95	
Tiruchi		3			3	3	3		27		1		67	
2022-23														
Zone	Aston Martin	Audi	Lamborghini	Bentley	BMW	Jaguar Land Rover	Maserati	Mercedes - Benz	Porsche	Rolls - Royce	Gran Tota			
Chennai		33	7	3	547	73	1	726	52	2	1,44	4		
Coimbatore	1	21			191	24		164	23		424	4 50	ource:	
Madurai		4			40	5		26	1		76		ommissioneral	
Tirunelveli		3		3	29	1		26	4		63		Transport	
Erode		2			27	2		24	3	-	58		nd Safety, mil Nadu	

- Tamil Nadu has seen an increase in registration of luxury cars among a growing affluent population.
- In 2023-24, 8,475 over ₹30 lakh priced cars were registered in the State an increase of about 46.2% from 5,797 cars in 2022-23.
- ◆ In 2021-22, 3,954 cars were registered, as against 2,816 cars in 2020-21.
- ✤ In 2019-2020, 4,187 cars were registered.
- The Chennai Zone saw the highest number of luxury brands registered at 1,668 in 2023-24.





It was followed by Coimbatore Zone with 510 cars, Madurai Zone, 110; Tirunelveli Zone, 95; and Tiruchi Zone, 65.

NATIONAL

New Governors Appointment 2024



- President Droupadi Murmu appointed Governors to nine states.
- Santosh Gangwar has been appointed Governor of Jharkhand.
- Former Lok Sabha MP from Assam Ramen Deka has been appointed Governor of Chhattisgarh.
- The Former Maharashtra Assembly Speaker Haribhau Kisanrao Bagde has been appointed Governor of Rajasthan.
- Former Deputy CM of Tripura Jishnu Dev Varma has been appointed Governor of Telangana.
- O P Mathur, a former member of the Rajya Sabha, has been appointed Governor of Sikkim.
- The Former Lok Sabha member from Karnataka C H Vijayshankar has been appointed Governor of Meghalaya.
- K Kailashnathan, a retired IAS officer, has been appointed the Lt Governor of Puducherry.





- C P Radhakrishnan, Governor of Jharkhand with additional charge of Telangana, will now be Governor of Maharashtra.
- Gulab Chand Kataria, Governor of Assam, has been appointed as Governor of Punjab and also Administrator of the Union Territory of Chandigarh.

INTERNATIONAL

UK - India New Technology Security Initiative



- India and the UK launched a Technology Security Initiative aimed at ensuring telecommunications security.
- It also makes way to collaboration in key areas such as critical minerals, semiconductors, artificial intelligence, quantum computing and health technology.
- The initiative builds on the cooperation agenda set out in the roadmap 2030 and will bring into sharper focus collaboration in critical and emerging technologies.
- Besides this, India has the initiative on Critical and Emerging Technology (iCET) with the US and the Trade and Technology Council with the European Union.

IAEA – UNOSSC Initiatives

- The IAEA and the United Nations Office for South-South Cooperation (UNOSSC) will launch a new series of joint activities to enhance collaboration.
- An agreement was signed during the recent UN High Level Political Forum in New York between the both.
- Through the agreement, the IAEA will participate in new UNOSSC programmes, including its 'Data to Policy Network' and 'Solutions Lab' over the next year.





✤ The agreement will link the International Atomic Energy Agency (IAEA) more closely with an international community of South-South practitioners.



First Climate Change Law - South Africa



- The South African President Cyril Ramaphosa has signed into law a broad climate change act.
- It will set caps for large emitters and require every town and city to publish an adaptation plan.
- ✤ It aims to enable South Africa to meet its emissions reduction commitments under the Paris climate agreement.





 South Africa is the world's most carbon-intensive major economy and among the top 15 greenhouse gas emitters.

SCIENCE AND TECHNOLOGY



Water Traces in Moon Soil

- Chinese lunar probe found traces of water in samples of the Moon's soil.
- The Chang'e-5 rover completed its mission in 2020, returning to Earth with rock and soil samples from the Moon.
- \clubsuit The lunar samples "revealed the presence of trace water".
- ◆ In 2020, water on the Moon was already confirmed by a NASA infrared detector.

Jupiter's Great Red Spot

- The Great Red Spot, the single largest, is the longest-lived storm in the entire Solar System.
- The great eyeball of Jupiter is revolving to gaze balefully out upon the cosmos.
- The Great Red Spot has significantly diminished since the first definite records of its existence in 1831.
- ✤ In the late 19th century, the Great Red Spot spanned a whopping 39,000 Km across.
- ♦ Now, it's just over a third of that width at 14,000 Km.





- ◆ Earth's 12,742-kilometer diameter could still fit inside.
- ✤ A massive anticyclone currently a little bit larger than Earth, with winds that howl around in an anticlockwise direction at up to 680 Km (425 miles) per hour.



MISCELLANEOUS

Last Universal Common Ancestor



Researchers are tracing the origins of life on Earth back to a single ancestor that emerged approximately 4.2 billion years ago.





- Scientists have pinpointed the emergence of the last universal common ancestor (LUCA) by analysing the genomes of present-day organisms.
- Earth itself is approximately 4.5 billion years old, indicating life originated when the planet was still in its infancy.
- The emergence of oxygen occurred relatively late in the planet's evolutionary timeline, possibly as recent as 3 billion years ago.
- Evidence in the form of microbial fossils dates back 3.48 billion years.
- LUCA was a complex organism, not too different from modern prokaryotes.
- But it possessed an early immune system, showing that even by 4.2 billion years ago.

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