

May - 27

TNPSC BITS

- ❖ IIT Madras has joined hands with the government of Israel to establish an 'India – Israel Center of Water Technology'.
- ❖ The Tamil Nadu government has gutka ban extended for a period of one year from May 23, 2023.
 - Tamil Nadu initiated the ban in 2016.
- ❖ Olympic champion Neeraj Chopra became the world number one for the first time in his career in the latest men's javelin throw rankings issued by the World Athletics.
- ❖ China became the world's top car exporter by surpassing Japan.
- ❖ The decade of the 2080s of Bikram Samvat will be marked as 'the Visit Nepal decade' and the year 2025 as the special year for tourism.
- ❖ Ireland has approved new rules that will require extensive health labelling on alcoholic beverages, including cancer warnings and a calorie count.
 - This is the first time in the World.

TAMIL NADU

New ministers in-charge for districts

- ❖ The state has shuffled certain ministers who are in charge of specific districts to coordinate welfare schemes, expedite projects and monitor their implementation.
- ❖ On October 19, 2021, Government appointed his cabinet colleagues as in charge of 14 specific districts to monitor welfare schemes and undertake emergency works during natural calamities.
- ❖ Now, changes have been made and hereafter 16 districts will have a minister as in-charge.

eVTOL aircrafts

- ❖ The ePlane Company, a developer of Electric Vertical Take off and Landing (eVTOL) aircrafts has received Design Organisation Approval from the Directorate General of Civil Aviation (DGCA).
- ❖ Incubated at IIT Madras, Chennai since 2019, the ePlane Company was founded by Satyanarayanan Chakravarthy.

- ❖ The ePlane Company is in pursuit of developing India's first compact flying electric taxi.
- ❖ It was designed for intra-city commutes and cargo transport.
- ❖ The ePlane e200 is a two-seater aircraft that is designed to operate in urban spaces.



NATIONAL

'Sengol' sceptre



- ❖ A golden sceptre called 'Sengol' would be installed at a prominent spot in the new Parliament building.

- ❖ It was presented to Jawaharlal Nehru, India's first prime minister, as a symbol of the transfer of power from the British.
- ❖ The word 'Sengol' is believed to have been derived from the Tamil word 'semmai', which refers to excellence.
- ❖ It was believed that Nehru sought the advice of C Rajagopalachari, the last Governor-General of India for this.
- ❖ It was believed that Rajaji suggested the use of the 'Sengol'.
- ❖ It was believed that He was inspired by the Chola dynasty, where a similar ceremony was held to transfer power between kings.
- ❖ The 'Sengol' was crafted by Vummidi Bangaru Chetty of Madras.

The term 'forum shopping'



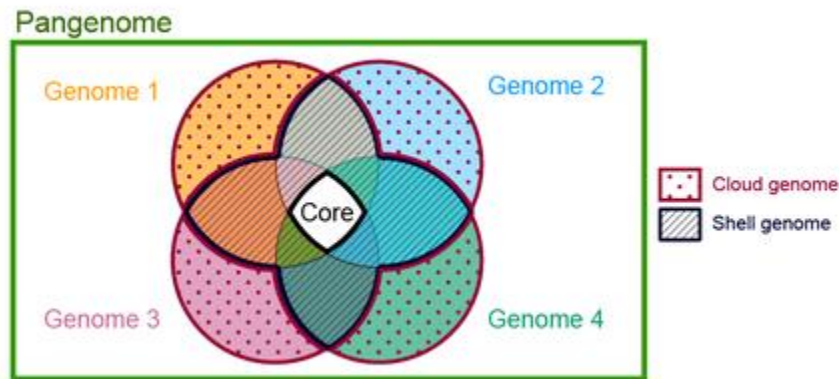
- ❖ The CJI Chandrachud condemns 'forum shopping' in his recent trail.
- ❖ The term described that, when litigants or lawyers attempt to deliberately move their case to a particular judge or Court where they think the judgment could be more favourable.
- ❖ The Supreme Court in its 1988 ruling in 'Chetak Construction Ltd. vs. Om Prakash' said, "A litigant cannot be permitted choice of the forum".

SCIENCE AND TECHNOLOGY

Pan Genome Map

- ❖ A recent study published in the Nature journal presents a pangenome reference map.

- ❖ It is built by using genomes from 47 anonymous individuals (19 men and 28 women).
- ❖ They are mainly from Africa but also from the Caribbean, Americas, East Asia, and Europe.
- ❖ Our genome consists of 23 different strings, each composed of millions of individual building blocks called nucleotides or bases.
- ❖ The four types of building blocks (A, T, G and C) are arranged and repeated millions of times in different combinations to make all of our 23 chromosomes.
- ❖ Genome sequencing is the method used to determine the precise order of the four letters and how they are arranged in chromosomes.
- ❖ Sequencing individual genomes helps us understand human diversity at the genetic level and how prone we are to certain diseases.



Artificial Leaf



- ❖ Researchers from the University of Cambridge have developed an “artificial leaf”.

- ❖ It can convert carbon dioxide into liquid fuels by harnessing the power of sunlight.
- ❖ Importantly, these can directly be used by internal combustion vehicles as drop-in fuels.
- ❖ They replicated the process of photosynthesis by converting carbon dioxide, water and sunlight into two multi carbon fuels— ethanol and propanol.

ENVIRONMENT

Coal Power Plants Top the EU Emitters List

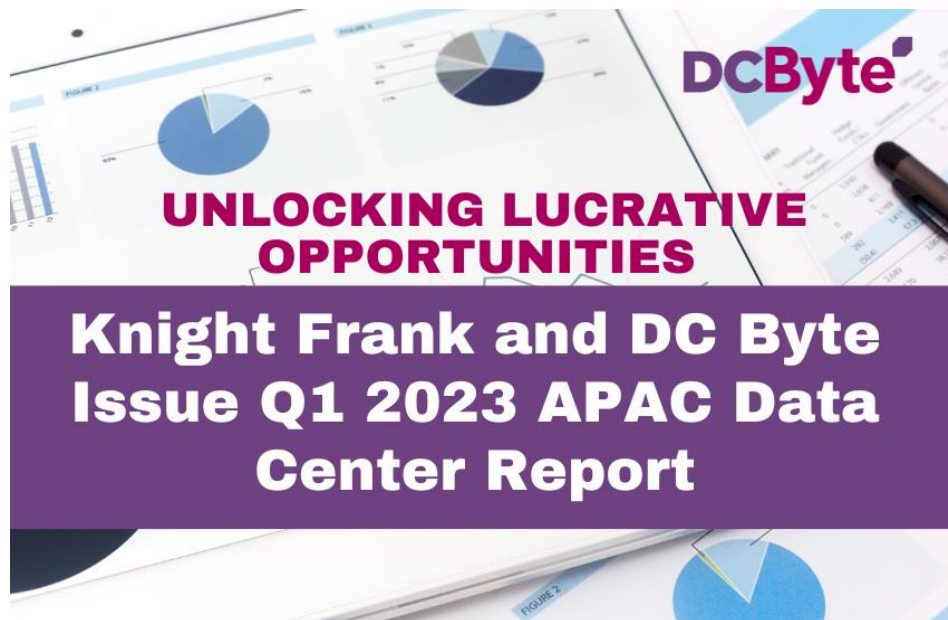
| Power Plant | Owner | Fuel | Position | Emissions 2022 (Mt CO2e) |
|--|----------|-----------|----------|--------------------------|
|  Bełchatów | PGE | Lignite | 1 | 35.06 |
|  Neurath | RWE | Lignite | 2 | 24.22 |
|  Boxberg | EPH | Lignite | 3 (▲2) | 19.13 |
|  Niederaußem | RWE | Lignite | 4 (▼1) | 17 |
|  Kozienice | ENEA | Hard Coal | 5 (▼1) | 15.54 |
|  Jänschwalde | EPH | Lignite | 6 | 15.31 |
|  Weisweiler | RWE | Lignite | 7 | 14.93 |
|  Lippendorf | EPH/EnBW | Lignite | 8 (▲1) | 11.91 |
|  Turów | PGE | Lignite | 9 (▲2) | 11.22 |
|  Maritsa East 2 | BEH | Lignite | 10 (▲7) | 10.93 |

- ❖ Global energy think tank Ember released a report titled ‘Repeat offenders: coal power plants top the EU emitters list’.
- ❖ The ten largest emitters in the European Union Emissions Trading System in 2022 were all coal plants.
- ❖ Germany and Poland dominating the list.
- ❖ However, the long-term trend of coal power emissions shows a decline.
- ❖ The values in 2022 40 per cent lower than a decade ago.

- ❖ Coal power emissions rose 6 per cent compared to 2021, but remained below 2019 levels.

REPORTS AND INDICES

Data Centre Q1 2023 Report



- ❖ International property consultant Knight Frank along with DC Byte has released a 'Data Centre Q1 2023' report.
- ❖ The report focuses on nine rapidly emerging markets in APAC - Bangkok, Hong Kong, Kuala Lumpur, Mumbai, Seoul, Shanghai, Singapore, Sydney and Tokyo.
- ❖ Shanghai, Tokyo and Mumbai have emerged as the top Data Centre markets in the Asia-Pacific region.
- ❖ Mumbai is the only city from India on the study and has emerged as the standout growth story of Q1, 2023.

STATES

First Neo Metro

- ❖ The country's first Neo Metro will start on two corridors in Dehradun.
- ❖ Also, Haridwar will see the country's first Pod taxi.
- ❖ Neo Metro is the rubber tyre-based mass transit system that draws power from an overhead electric conductor.

- ❖ It runs on a dedicated elevated track.
- ❖ Provide on Demand (Pod) taxis are driverless electric vehicles that move on a specially designed track.

| PROJECT DETAILS | | | |
|------------------------|------------------------|--------------------------------|--------------------------------|
| Project | Commencing year | Fare per person (in Rs) | Estimated (in Rs crore) |
| Dehradun Neo Metro | 2026-27 | Yet to be decided | 1,663 |
| Pod Taxi Haridwar | 2026-27 | 20 to 90 | 1,330 |
| Chandi Devi ropeway | 2025 | 155 (for one side) | 161 |
| Neelkanth | 2027 | 330 (for one side) | 466 |

PERSONALITIES, AWARDS, AND EVENTS

FIJI's highest civilian awards



- ❖ Indian Prime Minister held meetings with his counterparts from Papua New Guinea, Fiji and New Zealand.
- ❖ Modi was the first Indian premier to travel to Papua New Guinea.

- ❖ Papua New Guinea Governor-General Bob Dadae conferred the Grand Companion of the Order of Logohu on Modi.
- ❖ This is the country's highest civilian award and recipients are titled "chief".

IMPORTANT DAYS

Indian Commonwealth Day 2023 - May 24



- ❖ An international Commonwealth Day is celebrated every year on March 13.
- ❖ But it is observed on May 24 in India and a few other nations.
- ❖ Following Queen Victoria's passing on January 22, 1901, Commonwealth Day was first celebrated in 1902 as a way of honouring her.
- ❖ The first commemoration of this important day took place on May 24, 1902.
- ❖ Theme for this year is "Forging a Sustainable and Peaceful Common Future."

