

April - 23

## TNPSC BITS

- ❖ The Indian Navy has successfully launched the fifth 25-tonne Bollard Pull (BP) Tug, 'Ojas', from Kolkata.
- ❖ The Meta has introduced its newest series - Llama 4, which will now improve the abilities of Meta AI across services like WhatsApp, Instagram, and Messenger.
- ❖ At the Next '25 conference, Google introduced Ironwood, their seventh-generation Tensor Processing Unit (TPU), the most powerful, scalable and an energy-efficient TPU Google has ever developed.

## TAMIL NADU NEWS

### Rare inscriptions from Pudukkottai district

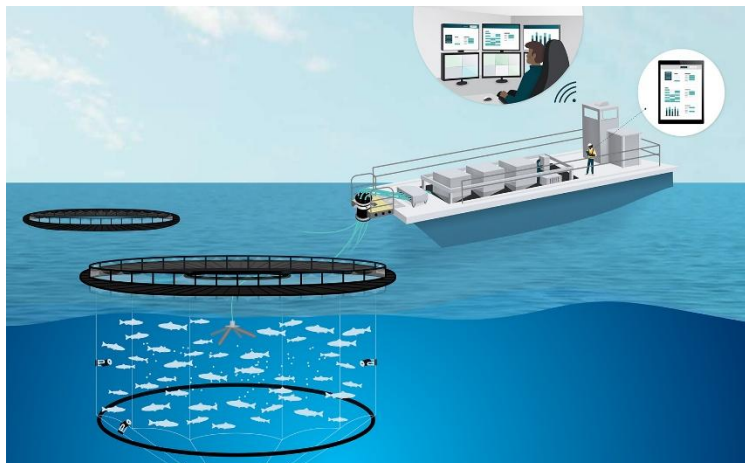


- ❖ The Epigraphy Division of the Archaeological Survey of India (ASI) has recently documented a set of inscriptions from Malayadipatti and Ponnamaravathi in the Pudukkottai district.
- ❖ Using the estampage method, the inscriptions were copied onto maplitho paper for preservation and further study.
- ❖ They discovered a rock inscription near the Kudambeeswarar Temple.
- ❖ Preliminary readings date the inscription to the 16th century.

- ❖ It also records the land partition agreement between the villages of Sundara Chozhapuram and Sevvalur, undertaken for the purpose of excavating an oorani (a water storage pond).
- ❖ Another inscription, found near a sunai (spring), refers to the King Raja Rajan Sundarapandyan.
- ❖ It records that a man named Udaiyan Perumal from Sevvalur contributed to the creation of this waterbody.
- ❖ At Chozheeswarar Temple in Ponnamaravathi, one of the inscriptions located on the western side of the sanctum sanctorum, dates back to the 8th regnal year of Maravarman Kulasekara Pandiyan.
- ❖ It mentions that this temple is known as the Chozheeswarar Udaiya Nayanar Temple which falls under the Uzhavalai Nadu division.
- ❖ It also mentions the donation of 40 panam for lighting of five lamps at specific locations within the temple.
- ❖ Another inscription found on the eastern wall dates back to the sixth regnal year of Raja Raja III and talks about the location of the temple as a place under the jurisdiction of Rajendra Chola Vala Nadu.
- ❖ Further the inscription talks in detail about the ceremonial offerings including rice, ghee and milk.

## NATIONAL NEWS

### **New sub-sea feeder system**



- ❖ The Atal Centre for Ocean Science and Technology for Islands (ACOSTI) of the National Institute of Ocean Technology (NIOT) of Chennai, has launched a new sub-sea feeder system to provide feed inside open sea fish cages.
- ❖ It has also launched a system to monitor the health of fish.

- ❖ These systems were recently launched at the Andaman and Nicobar Islands.
- ❖ These are aligned with the national goals under the Deep Ocean Mission and the vision for an inclusive blue economy.
- ❖ Since these cages are parked at depth of 7 m to 10 m, a water ejector based sub-sea feeder has been developed by NIOT to safely convey fish feed.
- ❖ This design not only enhances the feeding process but also significantly reduces energy consumption since it is powered by a floating solar power system.
- ❖ The National Institute of Ocean Technology (NIOT) was established in November 1993 as an autonomous society under the Ministry of Earth Sciences.
- ❖ The institute is based in Chennai.

### **New rules for traffic radar equipment verification**



- ❖ The Consumer Affairs Ministry has notified the new regulations requiring the mandatory verification and stamping of traffic radar equipment.
- ❖ It will be implemented from July 1 to improve the road safety and enforcement accuracy across the country.
- ❖ The new rules, which fall under the Legal Metrology (General) Rules, 2011.
- ❖ It will apply to "the microwave Doppler radar equipment" very widely utilised for measuring vehicle speeds on roads.

## **INTERNATIONAL NEWS**

### **Kite festival in Weifang of China**

- ❖ A team from Tamil Nadu have participated in the 42nd Weifang International Kite Festival.

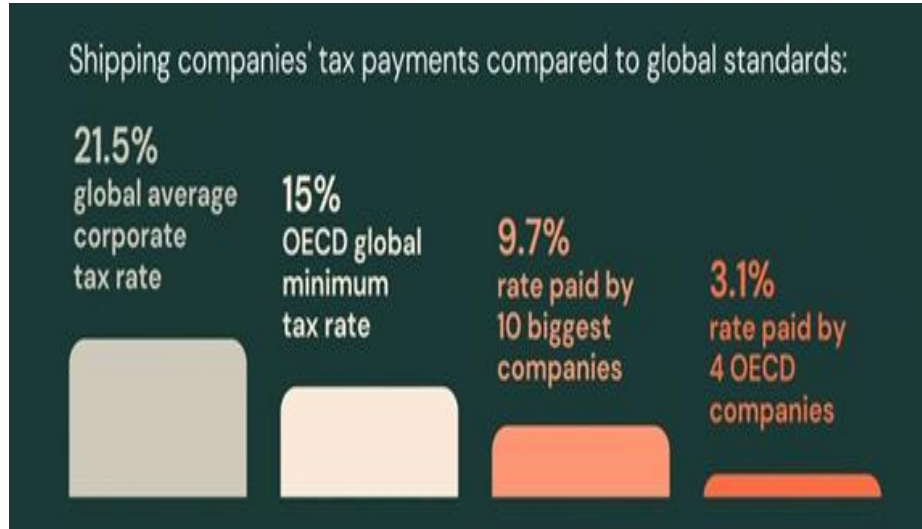
- ❖ The State's team, Team Skyters, from the house of Global Media Box, with the support of the Tamil Nadu Tourism showcased a giant inflatable Jallikattu Bull Kite.
- ❖ It was symbolising the power, pride, and tradition of the State's iconic sport.
- ❖ A vibrant kite emblazoned with the words 'Vazhga Tamil' (Long Live Tamil) in the Tamil letters was also flown.
- ❖ The event is recognised as the world's prestigious kite festival.
- ❖ It takes place in Weifang, Shandong Province, China.
- ❖ It is renowned as the 'Kite Capital of the World'.
- ❖ The Weifang International Kite Festival, now in its 42nd edition, is a spring tradition.
- ❖ Following this participation, the same symbolic kites will be featured at the Tamil Nadu International Kite Festival 2025 to be held in May month in Mamallapuram.



## Global shipping tax

- ❖ The “IMO Net-zero by 2050 Framework” has been approved during the Marine Environment Protection Committee's 83rd session in London.
- ❖ It combines mandatory emissions limits with greenhouse gas pricing across the entire shipping sector.
- ❖ The new carbon tax is expected to generate \$30-40 billion in revenues by 2030, approximately \$10 billion annually.
- ❖ The framework would deliver 60% emissions reduction by 2040 but fail to reach the promised net-zero by 2050.

- ❖ The policy has secured backing from 63 countries including the European Union, Japan, South Africa, and Singapore, alongside India, Brazil and China.
- ❖ Notably, petro-states like Saudi Arabia, the UAE, Russia, and Venezuela opposed the agreement.



### Climate Change Council

**Brazil proposed the creation of a Global Climate Council ahead of COP30**

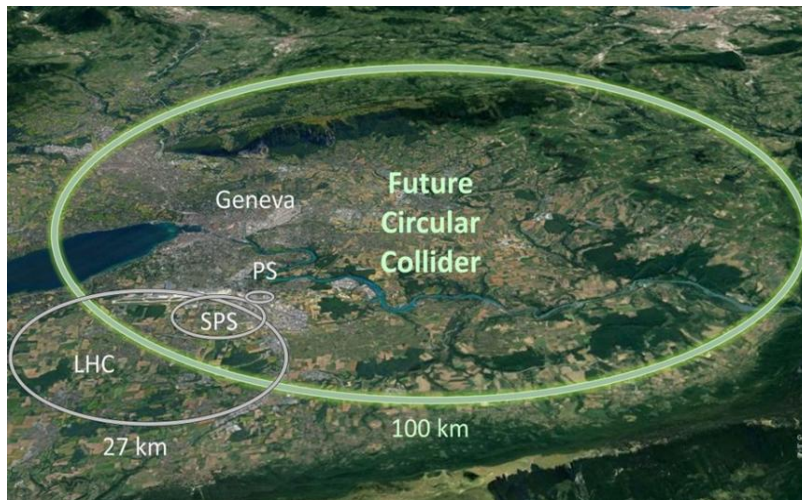
- ▶ Brazil has put forward a significant proposal to establish a Global Climate Council under the United Nations Framework Convention on Climate Change (UNFCCC).
- ▶ The 2025 UN Climate Change Conference (COP30) will be held in Belém, Brazil during the month of November.
- ▶ United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties 29 (COP29) concluded in Baku, Azerbaijan from nov 11 to 22, 2024

- ❖ Brazil has proposed the creation of a new international body to accelerate global climate action.
- ❖ The plan is shared ahead of this year's UN climate conference (Conference of the Parties – COP30) in Belem, a city in northern Brazil, in November 2025.
- ❖ The plan suggests forming a “Climate Change Council” under the United Nations Framework Convention on Climate Change (UNFCCC).

- ❖ The council would aim to fast-track decisions made at COP meetings, better coordinate international efforts, and make climate action more effective.

### **Future Circular Collider**

- ❖ CERN has cleared all technical hurdles as it moves to build the Future Circular Collider (FCC), slated to be the world's biggest particle collider.
- ❖ The FCC is planned to be an impressive 91 km long circular tunnel running beneath the Swiss-French border.
- ❖ The proposed FCC is designed to accelerate and collide the particles at the very unprecedented energies.
- ❖ The purpose of the proposed project is to collide protons at high energies in order to study fundamental forces and particles.

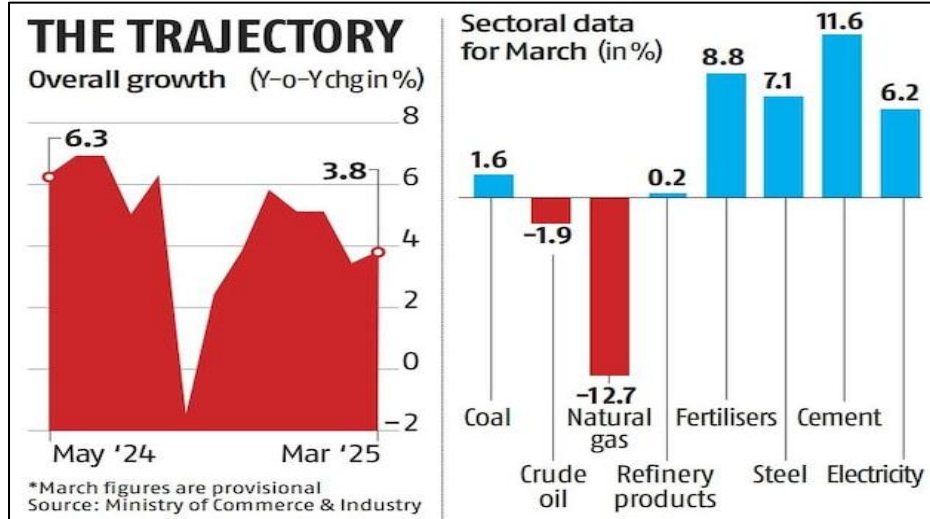


## **ECONOMY NEWS**

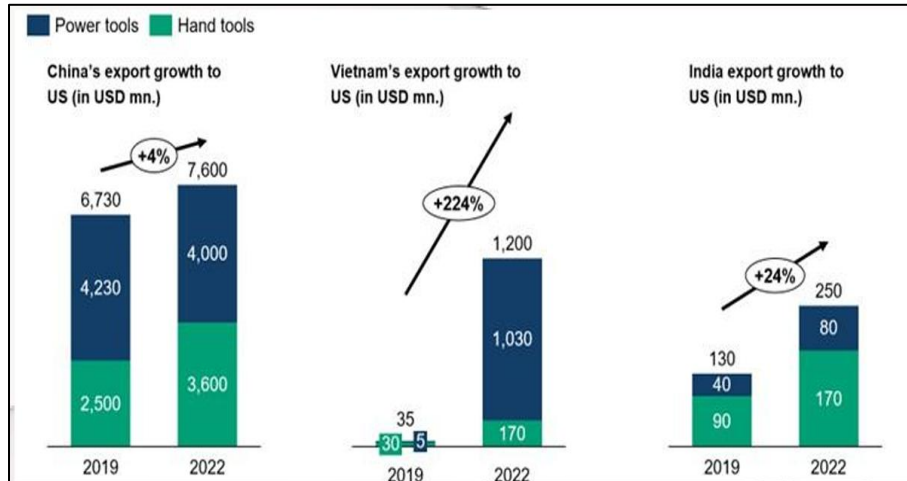
### **IIP Index - 28 days cycle**

- ❖ The Ministry of Statistics & Programme Implementation (MoSPI) will release the Index of Industrial Production (IIP) within 28 days instead of 42 days.
- ❖ It measures the trends in the behaviour of Industrial Production over a period of time with reference to a chosen base year.
- ❖ It indicates the relative change of physical production in the field of industries during a specified year as compared to the previous year.
- ❖ The latest print marks a sharp decline from the IIP growth of 5.2% in January and 5.6% in February 2024.
- ❖ Manufacturing growth halved to 2.9% in February, against 5.8% in January.

- ❖ Overall, industrial activity growth of 4.1% in 2024-25 (until February) was lower than 6% in the corresponding period in 2023-24.
- ❖ Among the three major sectors, only electricity has recorded a pickup in growth, rising to 3.6% in February, from 2.4% in January.



### Report on Hand and Power tools sectors

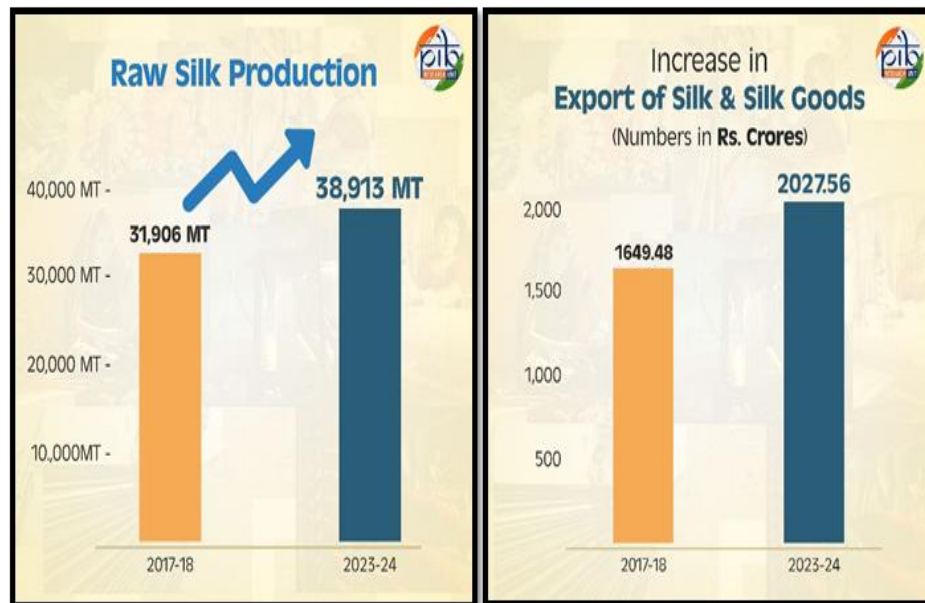


- ❖ NITI Aayog launched a report on Hand and Power tools sectors – ‘Unlocking \$25+ Billion Export Potential - India’s Hand & Power Tools Sector’.
- ❖ India has a smaller presence, 1.8% market share in hand tools and 0.7% market share in power tools.
- ❖ However, India can reach 10% market share in the power tools and 25% in hand tools in exports over the next decade.
- ❖ The worldwide tools market, which was estimated in 2022, is anticipated to be doubled to expand by 2035.

- ❖ Hand tools refer to non-motorized tools that rely on manual effort.
- ❖ Power tools use external source such as electricity or batteries to work faster and stronger.

### India silk production 2023-24

- ❖ India is the second-largest producer and consumer of silk globally.
- ❖ India's raw silk production increased from 31,906 MT in 2017-18 to 38,913 MT in 2023-24.
- ❖ The area under mulberry plantations had grown from 223,926 ha in 2017-18 to 263,352 ha in 2023-24.
- ❖ Exports of silk and silk goods rose from ₹1,649.48 crores in 2017-18 to ₹2,027.56 crores in 2023-24.



## SCIENCE AND TECHNOLOGY NEWS

### BM-04 Short Range Ballistic Missile

- ❖ DRDO has revealed a mock-up and details of the country's latest short-range ballistic missile called BM-04.
- ❖ The BM-04 can fly at hypersonic speeds (Mach 5 and above).
- ❖ It has an operation range of 400 to 1500 kilometres.
- ❖ The canister launched two-stage missile will use solid fuel to power its way to the enemy target.

- ❖ Only three other nations - Russia, United States of America and China - have the hypersonic missiles in their arsenal.



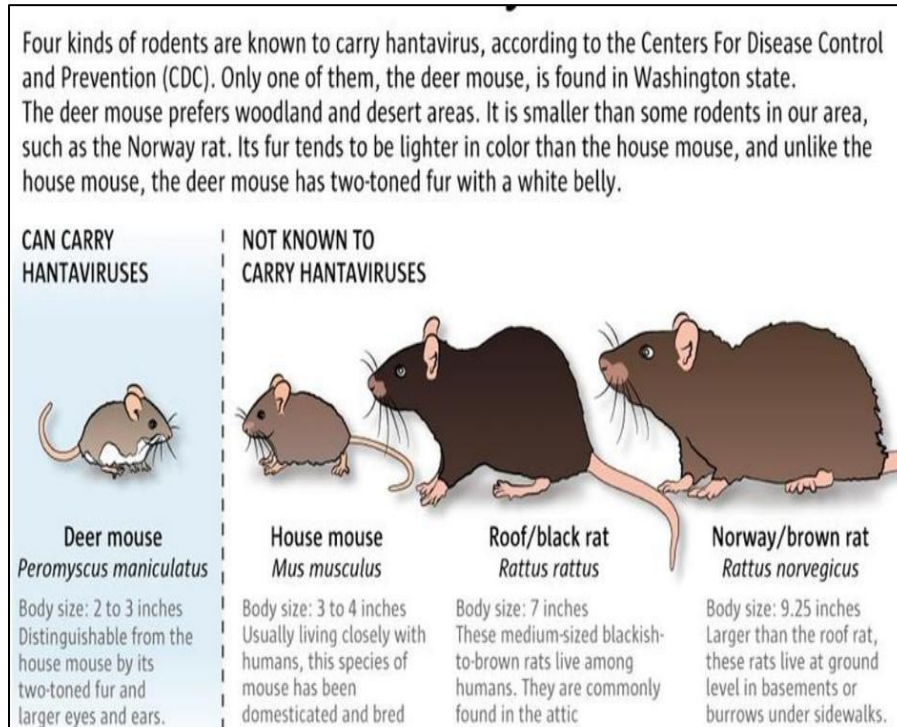
### Three Gorges Antarctic Eye Telescope



- ❖ China has inaugurated the Three Gorges Antarctic Eye telescope in Antarctica.
- ❖ It is a 3.2-meter radio/millimetre-wave telescope designed to unravel the secrets of star birth and the vast clouds of gas that cradle them.

- ❖ The primary scientific focus includes studying the Milky Way's neutral hydrogen and ammonia spectral lines.

## Black Rat and Hantavirus



- ❖ The black rats, an invasive species - are the sole carriers of hantavirus, the very deadly virus, in the rural parts of Madagascar.
- ❖ The hantavirus can cause the serious illness in humans and is usually spread through contact with the urine or droppings of infected rodents.
- ❖ The black rat, which originally came from Asia, arrived in Madagascar between the 10th and 14th centuries and has since spread widely.
- ❖ These rats were usually found in farmlands, not inside homes.

## ENVIRONMENT NEWS

### **Clidinium lalitae – Beetle**

- ❖ The Scientists have identified a new species of beetle belonging to the subfamily Rhysodinae.
- ❖ The newly found species are discovered in the Talle Valley Wildlife Sanctuary in Arunachal Pradesh.

- ❖ It has been named 'Clinidium lalitae', in much tribute to the late Dr. Lalita Ray Chaudhury, coleopterologist and former scientist at ZSI.



### **Live colossal squid**



- ❖ The first sighting of a juvenile colossal squid in its very natural environment was captured in deep sea.

- ❖ The colossal squid is part of the “glass” squid family (Cranchiidae).
- ❖ Three known glass squid species are found in the Antarctic Ocean, but it can be difficult to distinguish them on camera.
- ❖ The colossal squid was first described in 1925 based on the specimens from the stomach of a commercially hunted sperm whale.
- ❖ Colossal squid can grow up to seven metres and weigh as much as 500 kilograms, making them the heaviest invertebrate on the planet.

### **Tigers outside reserves**



- ❖ The Ministry of Environment, Forest and Climate Change is learnt to be finalising the contours of the “tigers outside tiger reserves” project.
- ❖ It aims to reducing human-animal conflict and stepping up monitoring outside tiger reserves to tackle poaching would be the two key focus areas
- ❖ Nearly 30 per cent of the country’s estimated 3,682 tigers being reported outside notified reserves.
- ❖ The National Tiger Conservation Authority (NTCA) will implement the project.

- ❖ NTCA has identified 80 forest divisions across 10 states where it will first be rolled out.
- ❖ 378 people were killed due to conflict with tigers between 2020 and 2024, including 110 in 2022 alone.

## MISCELLANEOUS NEWS

### Climate Change Impact on Women and Children

- ❖ The Union Ministry of Women and Child Development (WCD) recently released the report titled “How Does Climate Change Impact Women and Children Across Agroecological Zones”.
- ❖ India has 20 agro-ecological zones with different climates and landscapes.
- ❖ Jharkhand, Gujarat, Maharashtra, and Andhra Pradesh each have five agro-ecosystems.
- ❖ North Eastern Hills (17) covers nine states.
- ❖ Western Coastal Plains (19) spans eight states.
- ❖ Children under 5 years face the highest risk due to their small size, the weaker immunity, and dependence on caregivers.

