

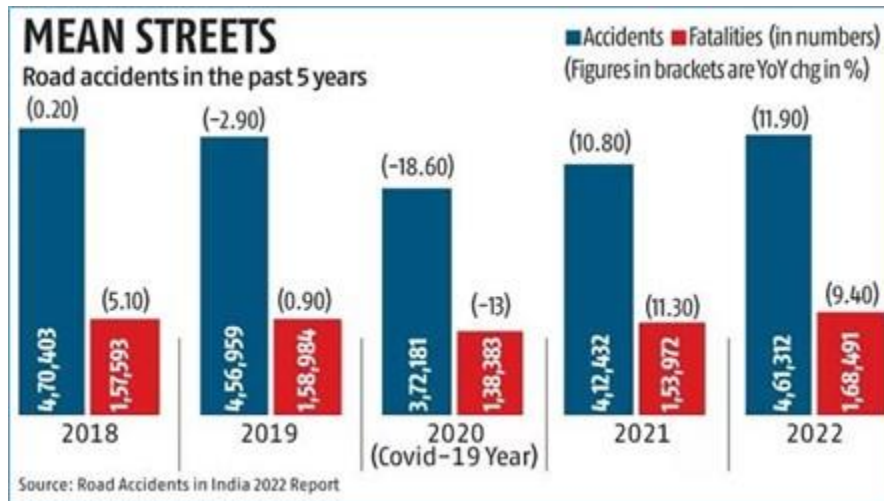
February - 15

TNPSC BITS

- ❖ Sindhu Ganapathy (37) has emerged as the first transwoman Travelling Ticket Examiner (TTE) of Southern Railway (gets posted in Dindigul).
- ❖ The President of India inaugurated the Aadi Mahotsav 2024, an annual national tribal festival, in New Delhi.
- ❖ 23rd Edition of the World Sustainable Development Summit was organized by The Energy and Resources Institute – TERI in New Delhi.
- ❖ The Global Navigation Satellite System (GNSS) based barrier less free flow tolling was implemented pilot project on access-Controlled 10-lane Mysuru-Bengaluru Expressway (Highway).
- ❖ Australia lifted their fourth title at the Under -19 cricket World Cup by defeating India in the final of the ICC U-19 World Cup final 2024, held at South Africa.
- ❖ The Indian fast bowler, Jasprit Bumrah, became the first Indian pacer to top the ICC Men's Test Bowling Rankings.

TAMIL NADU

Road accidents Trends



- ❖ Tamil Nadu recorded the highest number of road accidents on its network of National Highways in 2022 with 64,105 accidents.
- ❖ The State saw 17,884 fatalities due to road accidents.
- ❖ In the entire country, a total number of 4,61,312 road accidents have been reported during the calendar year 2022.

- ❖ It is claiming 1,68,491 lives and causing injuries to 4,43,366 persons.
- ❖ Tamil Nadu's 64,105 accidents form 13.9% of all accidents that happened in the country last year.
- ❖ It was followed by Madhya Pradesh with 54,432 accidents.
- ❖ The State retained its top position in 2022 for the fifth consecutive year.
- ❖ There were 22,961 accidents on National Highways in 2018, 21,489 accidents in 2019, 18,372 accidents in 2020, 16,869 accidents in 2021 and 18,972 accidents in 2022.

Land Pooling Area Development Scheme Rules, 2024



- ❖ The Tamil Nadu government has recently notified the Tamil Nadu Land Pooling Area Development Scheme Rules, 2024.
- ❖ The scheme enabled planned development of new areas, provides basic amenities and mobilises land for trunk infrastructure proposals.
- ❖ The scheme, as defined in the Tamil Nadu Town and Country Planning (Third Amendment) Amendment Act, 2023, provides for pooling together land owned by individual/individuals and developing it by the appropriate planning authority.

- ❖ A part of such developed land is transferred to the original owner, and the remaining portion is used to establish common facilities and amenities, or, for sale.
- ❖ The land pooling ownership certificate is to be issued by the authority to land-owners within 60 days of the publication of the final scheme.
- ❖ In 2018, the then government amended the Tamil Nadu Town and Country Planning Act, 1971 to introduce the 'land pooling area development scheme', and eventually notified the draft rules in 2020.

NATIONAL

Kilkari Programme



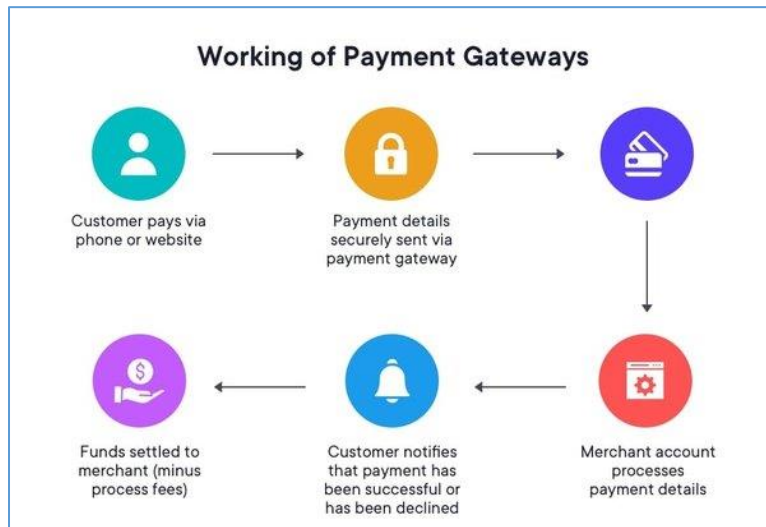
- ❖ The Kilkari programme, a Mobile Health (m-health) initiative, was recently launched for beneficiaries in local content in Gujarat and Maharashtra.
- ❖ 'Kilkari' (meaning 'a baby's gurgle'), is a centralized interactive voice response (IVR) based mobile health service.
- ❖ It delivers free, weekly, time appropriate 72 AV messages about pregnancy, child birth, childcare to the mobile phones of beneficiaries.
- ❖ Currently Kilkari is under implementation in 18 states/UTs.

ECONOMY

New Payment Aggregator Approval

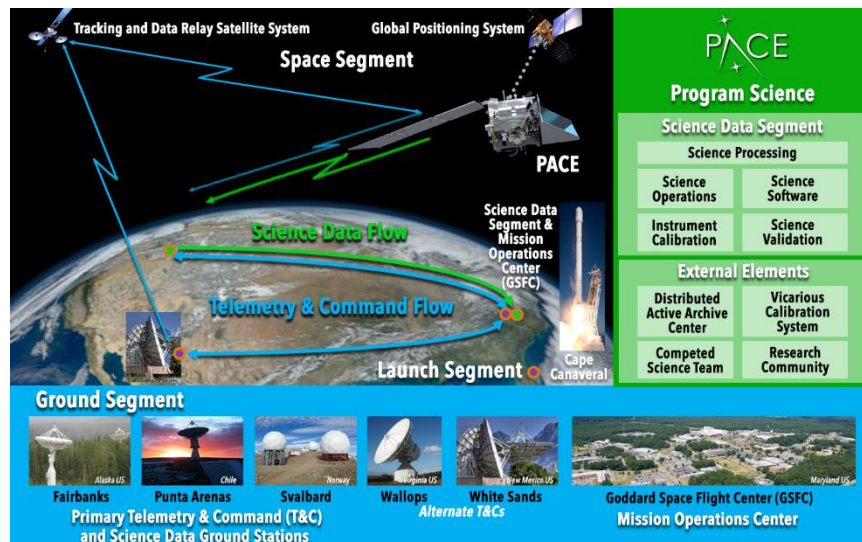
- ❖ RBI has authorized payment aggregator license to Zoho and fintech companies Juspay and Decentro.
- ❖ Earlier Stripe, Zomato, and Tata Pay received approval in January 2023.
- ❖ Major fintech players like Razorpay and Cashfree received the license in 2022.

- ❖ Till now, a total of 8 companies have got the payments aggregator license from the RBI.
- ❖ The license allows companies to offer payment services to online businesses and e-commerce companies.
- ❖ They will accept payments from customers on behalf of merchants and pool the funds before transferring them to merchants after a set period of time.



SCIENCE AND TECHNOLOGY

PACE Mission

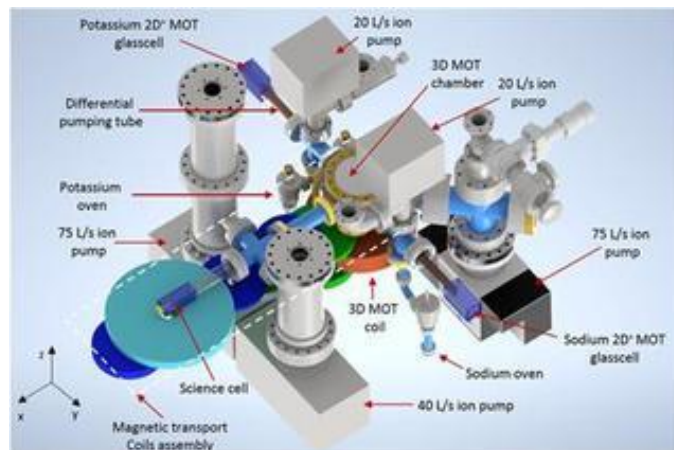


- ❖ Nasa's Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) mission soared into orbit by SpaceX Falcon 9 rocket.

- ❖ The Pace mission is a step forward in the study of Earth's oceans, air quality, and climate change.
- ❖ Pace is equipped with advanced instruments designed to observe the minutiae of our planet's ecosystems.
- ❖ This data is vital for forecasting the health of fisheries, tracking harmful algal blooms, and detecting marine environmental changes.

Imaging of Cold Atoms

- ❖ The Indian scientists at the Raman Research Institute (RRI) of Bengaluru have designed a new image-correction algorithm.
- ❖ It significantly enhances the study of ultracold atoms.
- ❖ It improves the clarity of images captured during experiments with cold atoms, or atoms at temperatures near absolute zero.
- ❖ The new algorithm effectively reduces interference fringes—unwanted dark and bright patterns that can obscure critical data—by 50 percent.
- ❖ These fringes can lead to inaccuracies when determining key atomic parameters such as number, temperature, and dynamics on short timescales.
- ❖ To study these ultracold atoms, researchers typically use magneto-optical traps and high-power laser cooling techniques.



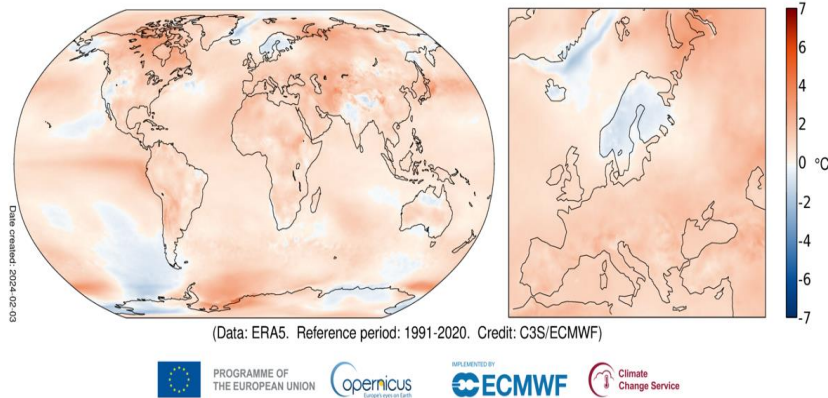
ENVIRONMENT

Hottest 12 Months Ever

- ❖ The global mean temperature for the past 12 months (February 2023-January 2024) was the highest on record.
- ❖ It is 1.52° Celsius above the 1850-1900 pre-industrial average.

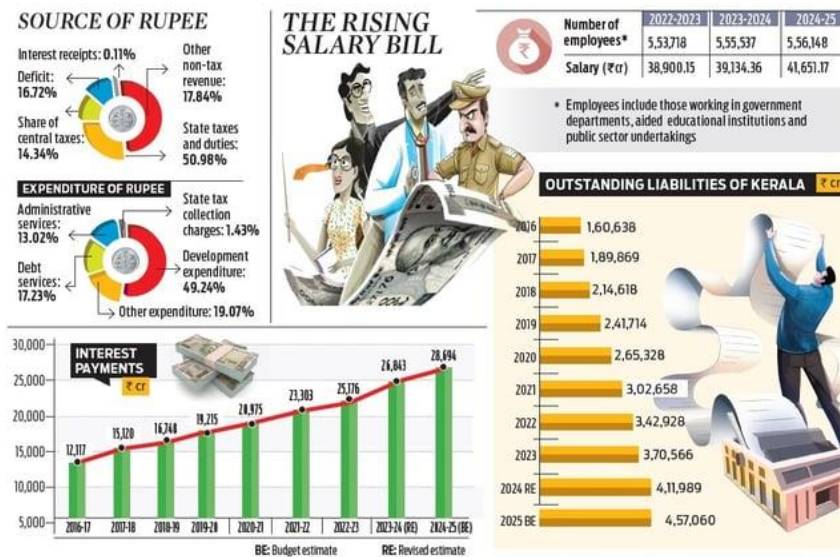
- ❖ In 2015, countries agreed in Paris to limit the average temperature rise to well below 2° Celsius, and preferably to 1.5° Celsius, compared to pre-industrial levels (1850-1900).
- ❖ To achieve this goal, countries together need to cut down the emissions of planet-warming greenhouse gases like carbon dioxide and methane by 43% by 2030.

Surface air temperature anomaly for February 2023 to January 2024



STATES

Kerala's Environment Budget

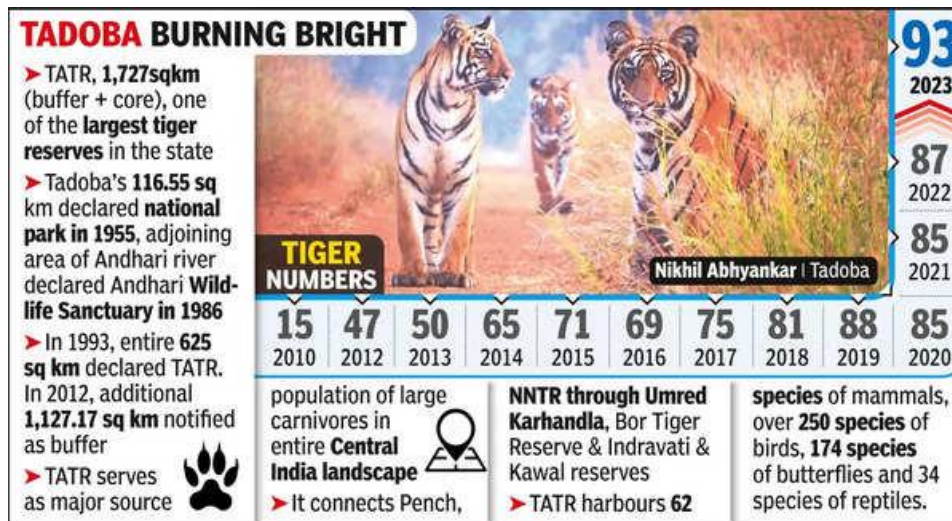


- ❖ In a first, the Kerala government has introduced an Environment Budget as a separate document along with the State Budget.
- ❖ It is evaluating environmental impacts of budgetary and fiscal policies and integrating environmental concerns into the policies and programmes of the State.

- ❖ The document highlights 81 schemes in nine sectors and their Budget allocations in environment-related areas.
- ❖ The sectors selected for the first Environment Budget are agriculture, livestock, fisheries, forests and wildlife, environment, water resources, cooperation, soil survey, and the energy sector.
- ❖ The total outlay for environment-related schemes in the Budget allocations for these sectors is approximately ₹668.88 crore for 2024-25.

Tadoba Kawal conservation reserve

- ❖ The Telangana State declared the corridor area between Tadoba-Andhari Tiger Reserve and Kawal Tiger Reserve as a conservation reserve.
- ❖ Tadoba-Andhari Tiger Reserve is located in Maharashtra.
- ❖ Conservation and community reserves are two more protected areas appended to the Wildlife Protection Act, 1972.
- ❖ As per the Section 36(A) of the Act, the State government may declare any areas owned by it.



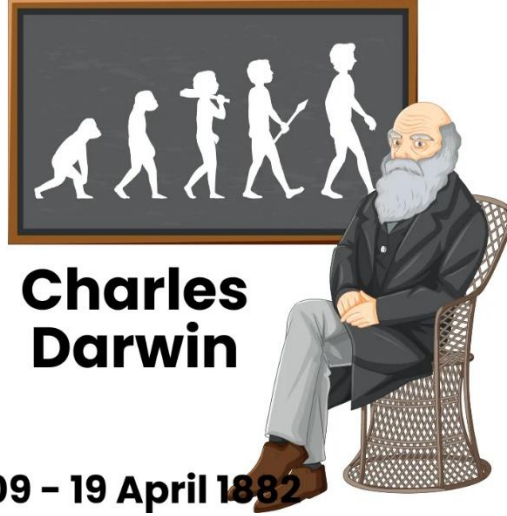
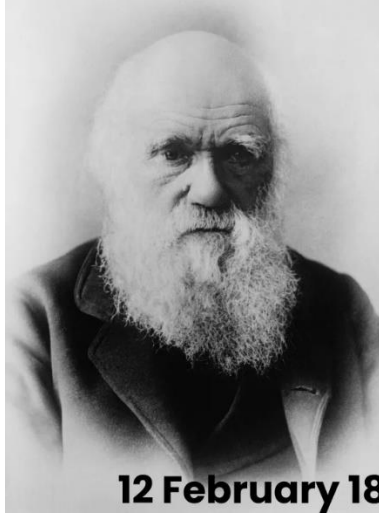
IMPORTANT DAYS

Darwin Day 2024 - February 12

- ❖ This day commemorates the birthday of Charles Darwin on February 12, 1809.
- ❖ Charles Darwin was a British naturalist, geologist, and biologist who is widely recognized as the father of evolutionary biology.



- ❖ This day highlights his contributions to science and to draw inspiration to promote scientific developments in general.
- ❖ In 1859, Darwin published his seminal work, “On the Origin of Species”.
- ❖ It outlined his theory in detail and presented compelling evidence to support it.



**Charles
Darwin**

12 February 1809 – 19 April 1882

