



January - 20

# **TNPSC BITS**

- ✤ The Indian Institute of Technology Madras (IIT) Madras has joined hands with Altair to launch an eMobility Simulation Lab.
- $\diamond$  The deployment of artificial reefs off the coast of 42 fishing villages in Thiruvananthapuram district began recently.
  - o The project is meant to boost fish resources and promote sustainable management.
- \* The Employees' Provident Fund Organisation (EPFO) has removed the Aadhaar card from the list of documents acceptable as date of birth (DOB) proof.
- \* Rohit Sharma overtook Glenn Maxwell and Suryakumar Yadav in the list of players with the most centuries (5) in T20 internationals.
- ◆ England's Sue Redfern is set to become the first ICC-appointed female neutral umpire to stand in a bilateral series during the upcoming WT20I between Australia and South Africa.



# **TAMIL NADU**

◆ The ASER 2023 'Beyond Basics' survey was conducted in 28 districts across 26 states.





- The survey found that 97.2% of youth aged 14-18 were enrolled in some form of formal education institutions.
- ✤ Of that 70.3% youth were enrolled in government institutions.
- It showed that under a quarter of the teens surveyed could not read a Class IIlevel text in Tamil Nadu.
- While the all-district average indicated that 25% of teens could not read a Class-II text, in Perambalur district.
- ✤ 2.8% of the youth was not enrolled anywhere, and this was found to be higher among 17-18-year-olds as compared to the 14-16 age group.
- Among those aged 17-18, 12.4% males were not enrolled in any formal education institutions as compared to 4% females.
- ✤ Additionally, 16.4% were engaged in some work.
- ✤ Among all teens aged 14-18 years in Perambalur, 52.1% could do at least division and 78.3% could read at least sentences in English.
- Against the average of 63% who could perform digital tasks, Tamil Nadu stood at 68.3%.

# NATIONAL



#### **Operation Sarvashakti**

 Indian Army is launching a large-scale counter-terror operation — Operation Sarvashakti.





- It raided the Poonch-Rajouri region to flush out terrorists that have been hiding and spreading reign of terror in the forested region.
- The operation is reportedly modelled after Operation Sarp Vinash, conducted in 2003-04 in the same region.

## **2023 ASER Survey – Key Findings**



- This year's survey puts the spotlight on youth aged 14 to 18 years in rural India which was last studied in the 2017 survey.
- ✤ Around 30% are already working, often for their parents.
- ✤ About one in four children in the 14-18 age group still cannot read a Std II-level text fluently in their regional language.
- ✤ Across enrolment categories, girls do better than boys in this respect.
- ✤ More girls aspire to continue studying after class 12 than boys.
- ✤ More than half struggle with division (3-digit by 1-digit) problems, a skill that is usually expected in Std III or IV.
- ✤ About 57% can read sentences in English; more than 73% among them can also tell their meanings.
- Boys do better than girls in both arithmetic and English reading.





- ✤ About 90% of surveyed households had smartphones.
- ✤ Of the surveyed children, almost 95% boys and 90% girls could use a smartphone.
- ✤ The 'basic' ASER survey was first implemented in 2005 and is conducted annually until 2014.
- Since, 2014, it switched to an alternate-year cycle in 2016.

#### INS Cheetah, Guldar and Kumbhir

- Indian Navy Ships Cheetah, Guldar and Kumbhir were decommissioned on 12 Jan 2024 after rendering four decades of glorious service to the nation.
- Cheetah, Guldar and Kumbhir were built at Gdynia Shipyard, Poland as Polnocny class Landing Ships.
- They were commissioned into the Indian Navy in 1984, 1985 and 1986 respectively.



#### 150 years of IMD

- ✤ On the occasion of India Meteorological Department (IMD) 150th year of establishment, it launched various initiatives.
- IMD launched a national framework of climate services (NFCS) to protect critical sectors through climate monitoring.
- It also launched Panchayat Mausam Sewa, a nationwide service to forecast weather at panchayat levels.





 IMD aims to reach every household with weather information through initiatives like mobile App and decision support system (DSS).



# SCIENCE AND TECHNOLOGY

New nuclear batteries



- Betavolt, a Chinese startup, has developed a battery capable of powering smartphones for an impressive 50 years without requiring recharging.
- ✤ It is termed as the world's first miniaturized atomic energy system.
- This nuclear battery utilizes 63 nuclear isotopes compactly arranged within a module smaller than a coin.





✤ After the decay period, the 63 isotopes transform into a stable, non-radioactive isotope of copper, posing no environmental threat or pollution.

## **ENVIRONMENT**

#### **Double Cicada Explosion**

- ✤ A double cicada emergence is on the cards this year, a rarity that is happening after 221 years.
- Two broods of cicadas will explode from the ground at the same time: Brood XIII and Brood XIX.
- Typically, the insects emerge from underground every 13 or 17 years, depending on the brood.
- But this year, both these broods will emerge together.
- This rare joint explosion of cicadas last happened in the year 1803, the year the Louisiana Purchase was made.
- ✤ Its next occurrence will happen only 421 years later.
- Cicadas are insects that spend the early stages of their lives underground.
- Once fully grown, they emerge in millions for food and to mate.
- While Brood XIX of cicadas emerges once every 13 years, Brood XIII explodes from the ground every 17 years.



# **STATES**

#### India's First Dark Sky Park

The Pench Tiger Reserve (PTR) in Maharashtra has been marked as India's first Dark Sky Park.





- It is the fifth such park in Asia for protecting the night sky and preventing light pollution, making the facility ideal for astronomy enthusiasts.
- ✤ A dark-sky preserve is an area, usually surrounding a park or observatory, that restricts artificial light pollution.
- The purpose of the dark-sky movement is generally to promote astronomy.
- Pench Tiger Reserve or Pench National Park is one of the premier tiger reserves of India.
- It is the first one to span across two states Madhya Pradesh and Maharashtra.



# **IMPORTANT DAYS**

#### **Cervical Cancer Awareness Month - January**



- This global healthcare event observed for the entire month of January every year, its aim to raise awareness of cervical cancer globally.
- ✤ This year's theme is "Learn. Prevent. Screen".





- The global incidence of cervical cancer in 2020 was estimated to be 6,04,000 new cases and 3,42,000 deaths.
- ✤ In 2020, nearly 90% of new cases and deaths were reported in low- and middleincome nations.

