

July - 20

## TNPSC BITS

- ❖ Madhya Pradesh government has set world record for planting over 12 lakh trees within 24 hours in Indore.
- ❖ Justice Kotiswar Singh became the first Supreme Court judge from Manipur.
- ❖ The Indian team, which participated at the 35th International Biology Olympiad (IBO) 2024, won a one GOLD medal and three SILVER medals.
- ❖ Asia's First Health Research "Pre-Clinical Network Facility" was inaugurated in Faridabad, Haryana.
- ❖ Uttarakhand Forest Department established Uttarakhand's first bird gallery in Dehradun.
- ❖ INS Delhi has been adjudged the Best Ship of the Eastern Fleet at the annual 'Fleet Awards Function-2024' held in Visakhapatnam.
- ❖ The Maltese politician Roberta Metsola has been re-elected as President of the European Parliament till 2027.

## TAMIL NADU

### Performance of Tamilnadu in SDG Index 2023-24

**Status report**

Tamil Nadu's score in eleven sustainable development goals, according to a NITI Aayog report (2023-24), has been higher than the national average. For two of the goals, the State's indicators have been on a par with the national average

Goal No.	Sustainable Development Goals	Tamil Nadu (out of 100)	National Average (out of 100)
1	No poverty	92	72
2	Zero hunger	75	52
3	Good health and well being	77	77
4	Quality education	76	61
5	Gender equality	53	49
6	Clean water and sanitation	90	89
7	Affordable and clean energy	100	96
8	Decent work and economic growth	81	68
Goal No.	Sustainable Development Goals	Tamil Nadu (out of 100)	National Average (out of 100)
9	Industry, Innovation and Infrastructure	67	61
10	Reduced Inequalities	76	65
11	Sustainable cities and communities	81	83
12	Responsible consumption and production	78	78
13	Climate action	81	67
14	Life below water	61	*
15	Life on land	72	75
16	Peace justice, and strong institutions	78	74

- ❖ SDG India Index 2023-24 has analysed the performance of States and Union Territories in achieving the goals on the basis of 70 targets and 113 indicators.
- ❖ Tamil Nadu stands third with a composite score of 78, surpassing national average of 71.



- ❖ Tamil Nadu has been classified a 'front runner' in 13 Sustainable Development Goals (SDGs) of the United Nations.
- ❖ The report categorises the performance of the States based on their scores as 'aspirant' (0-49), 'performer' (50-64), 'front runner' (65-99), and 'achiever' (100).
- ❖ Tamil Nadu took the third spot with a composite score of 78, surpassing the national average of 71.
- ❖ The State also retained its position as a front runner.
- ❖ The composite score of Tamil Nadu was 74 in the previous report released in 2020-21.
- ❖ Tamil Nadu tops in the goal of eradicating poverty, compared with the other States and the Union Territories.
- ❖ According to the Multidimensional Poverty Index, Tamilnadu stands at 2.2%, as against the national average of 14.96%.
- ❖ The report says 22% and 25% of the children aged below five in the State are underweight and stunted respectively.
- ❖ The Maternal Mortality Ratio for one lakh live births and Under-five Mortality Rate for 1,000 live births stood at 54 and 13 respectively.
- ❖ The rate of deaths in road accidents per one-lakh population was 23.31, one of the highest in the country.
- ❖ The gross enrolment ratio of students in higher secondary and higher education was 81.5% and 47% respectively,
- ❖ The national average of the same is 57.6% and 28.4%.
- ❖ Further, 81.87% of the rural households in Tamil Nadu are getting safe and adequate piped drinking water.
- ❖ The unemployment rate and labour force participation rate in the State in the age group of 15-59 were 4.8% and 62.3% respectively.
- ❖ Nearly 92.8% of the households own at least one mobile phone.
- ❖ The percentage of the population covered by Aadhaar is 97.94.
- ❖ The unemployment rate has come down from 7.2% to 4.8%.

## **NATIONAL**

### **All India Services (conduct) Rules, 1968**

- ❖ The Centre had constituted a single-member committee under the Department of Personnel and Training (DoPT) to examine all the documents submitted by the probationary IAS officer (Puja Khedkar).



- ❖ Recently Questions have been raised about her appointment under these categories.
- ❖ Civil servants are governed primarily by two rules:
  - The All-India Services (Conduct) Rules, 1968, and
  - The Indian Administrative Service (Probation) Rules, 1954.
- ❖ There is an additional set of rules that govern the conduct of officers during their probation period, which lasts for at least two years after selection to the services.
- ❖ Rule 12 gives the circumstances in which probationers can be discharged.
- ❖ The Physically Handicapped (PH) reservation was introduced with the batch of 2006 — 3% seats in every category (General, OBC, SC, and ST) are reserved for the differently abled.

### “All India Service Conduct Rules (1968)”

#### **5. Duty towards the Service:**

A member --- shall do nothing -- **unbecoming of an officer belonging to the Service.**

*Explanation:* **Acts unbecoming** shall include

**(b) Adoption of dilatory tactics** in dealing with public matters

### **Muslim women’s right to maintenance 2024**

- ❖ The recent Supreme Court judgment has upheld the divorced Muslim woman’s rights to claim maintenance under Section 125 of the Code of Criminal Procedure (CrPC), 1973.
- ❖ This case is known as Mohd Abdul Samad vs The State of Telangana,
- ❖ The Muslim Women (Protection of Rights on Divorce) Act was enacted in 1986 (MWA).
- ❖ This Act had created a new right for the divorced Muslim woman to claim maintenance during the iddat period as well as a fair and reasonable provision for the future.

- ❖ But this provision has contradistinction with Section 125 of the CrPC 1973.

### What the top court said

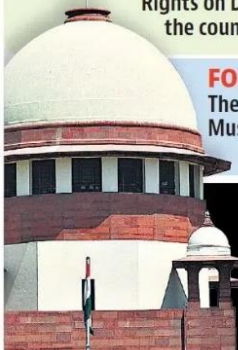
**GENDER EQUALITY**  
Discrimination against Muslim women in matters of alimony under secular laws will be regressive, it said

**PERSONAL LAW DOESN'T SUPERSEDE**  
Rejects argument that CrPc Section 125 provisions don't apply due to there being a personal law for Muslims and that the Muslim Women (Protection of Rights on Divorce) Act, 1986, will prevail over the country's secular law

**FORTIFYING WOMEN'S RIGHTS**  
The 1986 Act does not bar Muslim women from seeking maintenance under the CrPc

**SHAH BANO ALLUSION**  
Philosophy laid down in Shah Bano verdict lives through. In that case, the apex court ruled that Muslim women were entitled to maintenance under CrPc Section 125, which was later countered by the Rajiv Gandhi govt through the 1986 Act

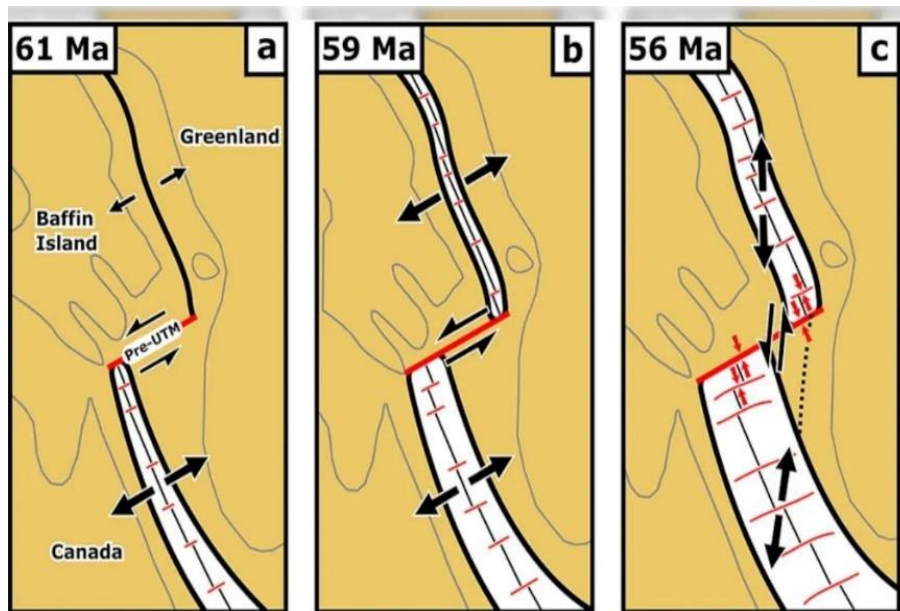




**"There cannot be disparity in receiving maintenance on the basis of the law under which a woman is married or divorced. The same cannot be a basis for discriminating a divorced woman entitled to maintenance..."**  
— **JUSTICE BV NAGARATHNA**,  
SC JUDGE, IN HER ORDER

## INTERNATIONAL

### New Microcontinent Discovery



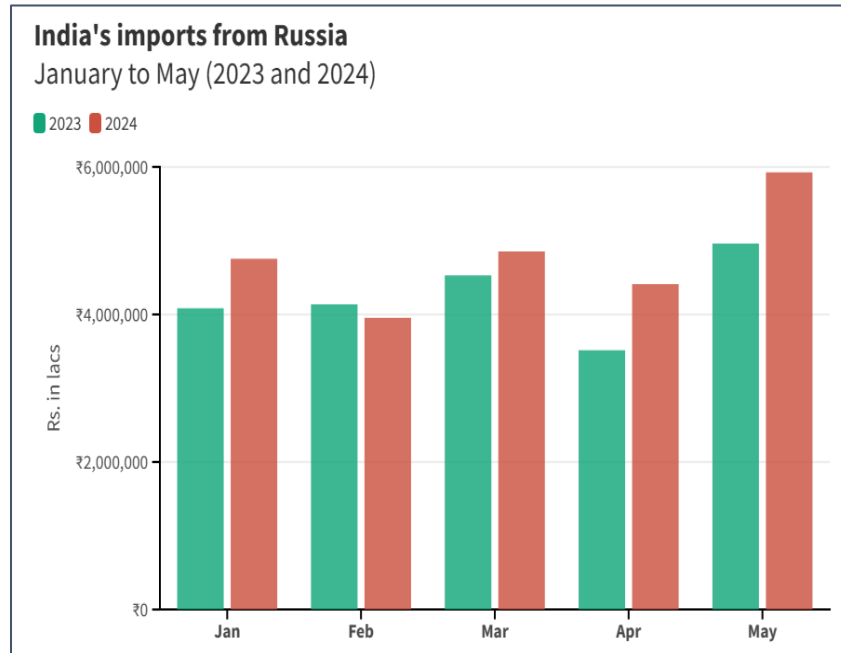
- ❖ Scientists discovered a New Microcontinent Between Greenland and Canada.
- ❖ The team believes this continent was formed about 58 million years ago.
- ❖ It is named as Davis Strait proto-microcontinent



- ❖ The formation of this microcontinent is attributed to the rifting and seafloor spreading that occurred between Greenland and North America.
- ❖ Davis Strait connects two water bodies - the Labrador Sea and Baffin Bay.

## ECONOMY

### Trade in Indian Rupee with Russia



- ❖ India and Russia have doubled their payments in national currencies (rupee-rouble) since last year.
- ❖ Since the beginning of the year, the volume of corporate deposits in rupees has increased sixfold.
- ❖ The bilateral trade in 2023-24 was already around \$65 billion, with \$60 billion just Russian exports to India, mainly in energy.

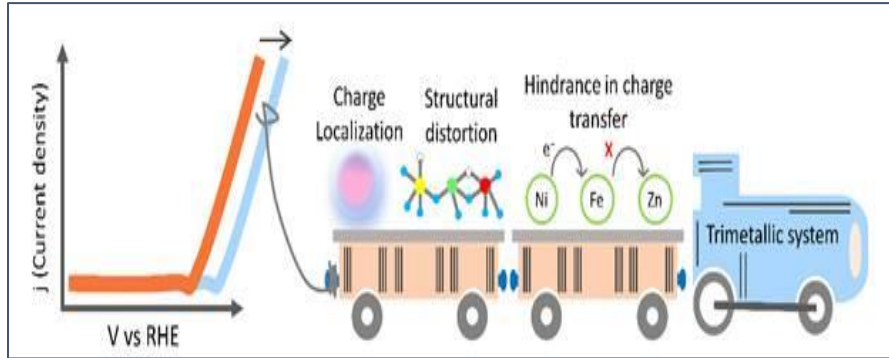
## SCIENCE AND TECHNOLOGY

### Bimetallic NiFe systems

- ❖ Bimetallic Nickel Iron layered double hydroxide system is sufficient for efficient O<sub>2</sub> production through water splitting.
- ❖ In an era of renewable energy, water splitting emerges as a beacon of hope in the quest for sustainable energy solutions.



- ❖ Water splitting can be reckoned as a sustainable and eco-friendly way to generate green and pure H<sub>2</sub> and O<sub>2</sub> on a larger scale without harming the flora and fauna.



## STATES

### Chandipura virus

### UNDERSTANDING CHANDIPURA VIRUS

Illustration: Ashok Adepal

**HISTORY:** In 1966, two doctors at Pune's Virus Research Centre (VRC) isolated a virus of the vesiculovirus family that is also behind diseases like stomatitis and causes fever, chills and muscular pain. As the patient was from Chandipura near Nagpur, it got the name Chandipura virus (CPHV). This virus has so far only been reported in India.

**WHAT CAUSES IT:** While mosquitoes have also been identified as possible vectors, its transmission is mainly caused by sandflies. When a female sandfly bites humans, the virus enters the patient's bloodstream. Sandflies are found in many parts of Asia, Africa, central and South America apart from India.

**SYMPTOMS:** Experts in the city say that unlike in other viral infections, in CPHV, health deteriorates rapidly, in 24-48 hours

- Very high-grade fever above 102 degrees Fahrenheit in the first 24 hours
- Vomiting/diarrhoea ● Severe headache ● Delirium in 24 to 48 hours ● Convulsions and fits
- Malfunction of internal organs such as liver

**Doctors say that any fever that lasts over 24 hours should be taken seriously and medical help should be sought. Full-sleeved clothes should be worn to reduce the risk of insect bites**

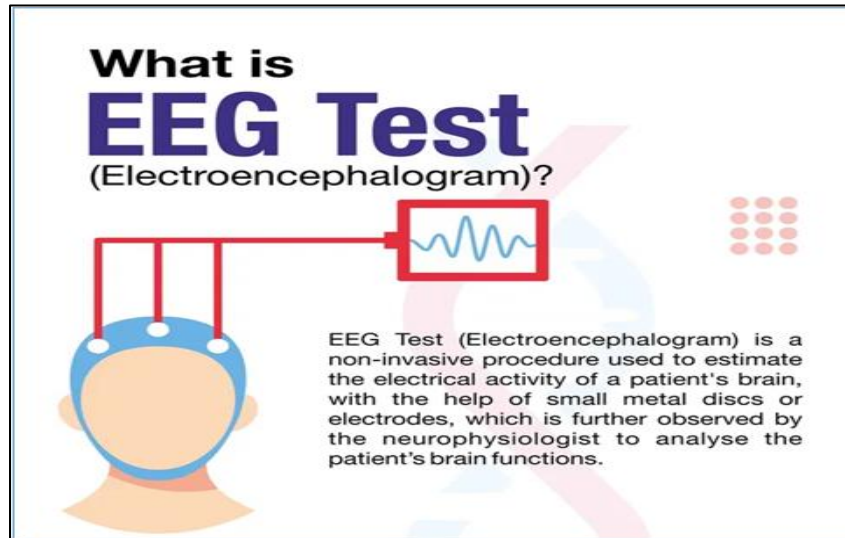
**OUTBREAKS IN INDIA:** The year 2003 saw a major outbreak in parts of Andhra Pradesh and Maharashtra. Gujarat saw spikes in cases in 2014, 2016 and 2019. Other states that have reported significant numbers of cases are Tamil Nadu, Karnataka, Bihar, Madhya Pradesh and Uttar Pradesh.

- ❖ Six children in Gujarat's Aravalli district are suspected to have died from the Chandipura virus.
- ❖ Chandipura virus, aka Chandipura vesiculovirus (CHPV), is an RNA virus belonging to the Rhabdoviridae family.
- ❖ It was first identified in 1965 in Chandipura, a village in Maharashtra.
- ❖ The virus primarily affects children and has been associated with outbreaks of acute encephalitis in India.

- ❖ The virus is primarily transmitted through the bite of infected sandflies (genus *Phlebotomus*).
- ❖ There is no specific antiviral treatment or vaccine for Chandipura virus infection.

## MISCELLANEOUS

### 100 years of electroencephalography (EEG)



- ❖ The EEG is a marvel of physics and neurobiology that opens a simple window into the human brain.
- ❖ In 1875, British physician Richard Caton reported evidence of electrical activity in the brains of monkeys and rabbits.
- ❖ In 1912, Vladimir Pravdich-Neminsky produced the first mammalian EEG, of a dog's brain.
- ❖ Hans Berger succeeded him in 1924 with the human counterpart.
- ❖ EEG stands for electroencephalography. 'Electro-' pertains to electricity.
- ❖ EEG measures electrical activity in the brain generated by neurons.
- ❖ It is better than other diagnostic devices at tracking relatively rapid electrical activity in the brain, in the order of milliseconds.

